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FEBRUARY 1956

COMMERCIAL CAR JOURNAL

A CHILTON PUBLICATION

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FEB 14 1956
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THE MAGAZINE FOR TRUCK AND BUS FLEET OPERATORS

in this issue

The Long Range Future for Trailer Freight
Planning a Tractor-Trailer Shop
More Miles from Your Maintenance Dollar

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1955

Mr. Barnes, whose headquarters are in Detroit, is shown in the Dodge truck cab. The trucks below are also part of the nationwide fleet of Dodge trucks in the Avis Rent-A-Truck System.

"Dodge trucks delivered 24 hours a day with unfailing dependability"

Says Clay A. Barnes, Regional Manager, Avis Rent-A-Truck System

Hundreds of mercantile and delivery firms throughout the nation depend on Avis System's Dodge trucks during peak load seasons. According to Clay A. Barnes:

"**Our scores of Dodge trucks** in the mid-west region sure proved their quality in day-after-day, 24-hour service for our commercial customers during the 1955 Christmas season.

"Traffic managers for department stores, delivery companies, furniture stores, and wholesale houses told us: 'Avis Dodge trucks delivered the goods for us 24 hours a day with unfailing dependability.'

"In addition, there were many good words for the Dodge truck's ease of handling and ability to negotiate heavy traffic quickly."

As fleet owners know, Dodge trucks are equally notable for cutting fuel costs, lowering upkeep. And Dodge prices are down with the lowest. Why not phone your Dodge dealer now?

DODGE
Job-Rated
TRUCKS
WITH THE *FORWARD* LOOK

Order Your Summer Savings Now

Plenty of imitators, but Olson Bodies *by Grumman* have a bigger backlog of orders than ever. The new plant, opened last July, will be further enlarged to meet the demand. Imitators offer quick deliveries and bargain prices, but they can't offer the quality and operating economies that Grumman's Quarter Century of Aluminum "know how" provides.

The fact that other body builders have been forced to imitate Bodies by Grumman when they would prefer to sell you steel bodies should convince you that Grumman Bodies really "Pay for Themselves thru Savings" — they weigh less, dent less, corrode less, depreciate less and last longer.

You can have lower delivery costs next summer if you order Olson Bodies now — through your Chevrolet, Ford or GMC truck dealer.

Or write for "Today's Economics of Route Deliveries" to J.B.E. Olson Corporation, 1740 Broadway, New York 19, N. Y., Tel.: COlumbus 5-4300.

OLSON by Grumman KURB SIDE

Bodies by Grumman "Pay for Themselves thru Savings"

COMMERCIAL CAR JO

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THIS MONTH'S FEATURES

Planning a Tractor-Trailer Shop 66
This one has never been built, but it incorporates the features of over 100 fleet shops plus ideas from many more. It's designed on a unit basis, can easily be added-to or subtracted-from to fill your specific needs.

High Voltage Fleets 71
Fifty million customers rely on the truck fleets of the nation's 1450 electric utilities for dependable service.

8-Point Program Sets New PM Goals 72
Chicago Transit's G. J. Clark highlights salvage and extending parts mileage in reporting on the steps being taken by this bus fleet to meet or better maintenance pars.

Electronics Guide Cargo Loading 74
"Nose light" trailer loading cost one fleet 6000 lb of payload per trip reports Control Cell Corp.'s E. S. Safford. He suggests a system for getting legal maximum.

Grandview Dairy Calls on the Experts 76
How can a small fleet have the latest in efficient maintenance yet keep overhead to a minimum? This fleet does it by using outside specialists seven different ways.

More Miles from Your Maintenance Dollar .. 80
From the SAE annual meeting last month, a timely report from several fleets on extending maintenance mileagewise as well as a look at more efficient cooling fans.

The Long Range Future 82
Trailers alone will carry 443.4 billion ton-miles of freight a year by 1975 predicts Professor M. J. Barloon in a 20-year forecast made at TTMA's annual convention.

Chevrolet's New Automatic Transmission ... 90
A 6-speed unit with torque converter and retarder for downhill braking, it is available on 15 2-ton models in Chevrolet's 1956 line also described here.

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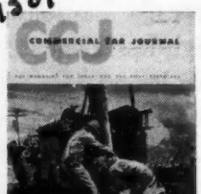

ON THE COVER . . .

Helping to keep some 50 million customers happy, electric utility fleets help build and maintain vast networks of transmisison and distribution lines, move technicians and materials where they're needed whenever service breaks occur. In a nation which takes dependable electric service for granted, these trucks have an important job, deserve the cover salute and the article which begins on page 71.

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Complete package, power source to blower, weighs 410 lb.

Dodge's ½ Ton "Town Wagon" 92
It's a cross between station wagon and panel delivery.

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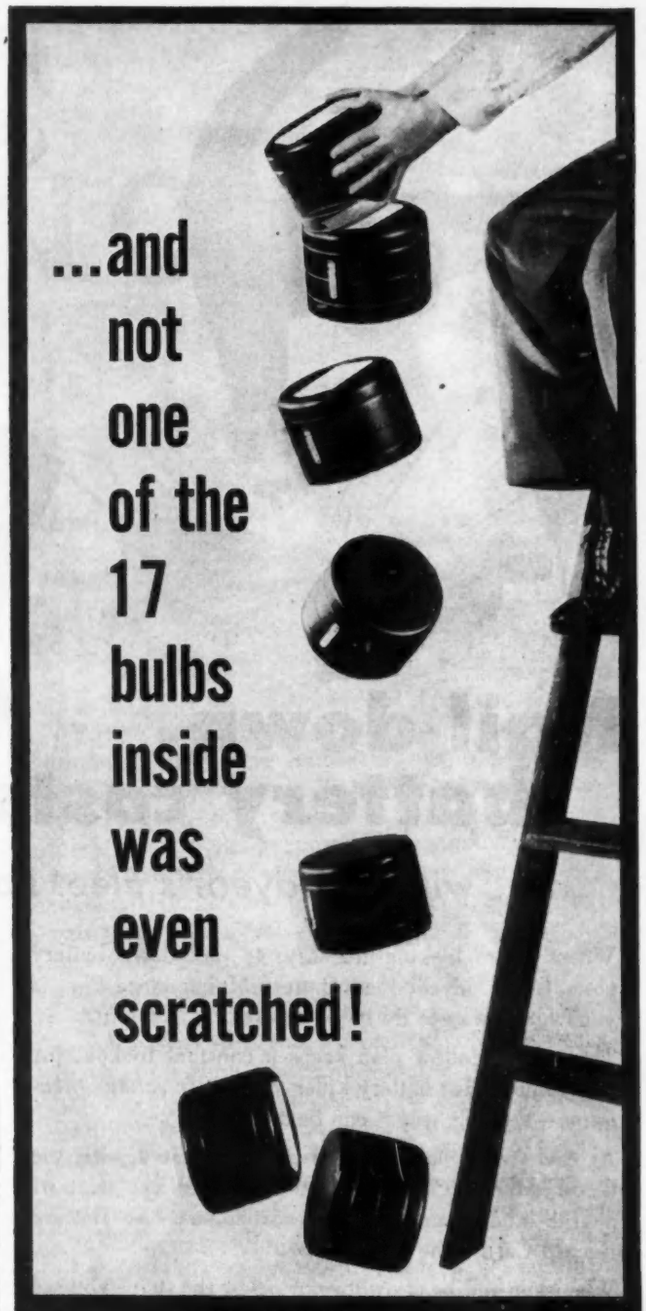

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And the savings continue to grow when you use this plan with Goodyear Heavy-Duty Truck and Bus or Diesel-type batteries.

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The OVERLOAD

EDITORIAL COMMENT

"If you have been following the same practice for two years, eye it with suspicion; for five years, begin to re-evaluate; for ten years, throw it out and start all over again"

WE ARE indebted to an old friend, Arnold Dach of Chestnut Farms Chevy Chase Dairy for the above quote. And a bit proud, too, for he is an alumnus of the CCJ editorial staff. Arnold sprung it as an opener at the SAE meeting in Detroit last month and neither of us know its exact origin. It's a good bet that at first it had nothing to do with the trucking industry—but it fits it like a glove.

At the SAE, it was applied specifically to a technical discussion of new lubricants and generally to stretching out preventive maintenance intervals (see page 80). It certainly applies with equal force to all maintenance procedures such as the current trend toward instrumentation and testing as opposed to fixed mileage replacements.

But it also goes far beyond maintenance. How about safety? Where is the safety *incentive* of a plan put into practice five years ago? Obviously it's as dead as last week's newspaper. Individual and team competitions, for instance, work fine when they're fresh. But when the excitement wears off, there's got to be a new approach.

Equipment that was the last word a few years back doesn't have what it takes today. In 1946 did you ever hear of high cube trailers, air suspension, a 90 or even a 96-in. tractor, powered front axles or a 317 cu. in.-truck engine developing 175 hp? A diesel engine east of the Rockies was virtually unheard of and "curved safety glass" was the subject of full page advertisements. Even *two* years ago there were no heavy-duty trucks with automatic transmissions in actual operation.

Fuels and lubricants—the very thing we started with—have come a surprising way. Octane ratings are much higher with resultant increases in compression ratios. There were mighty few multi-purpose greases and no multi-range oils. And unless we're mistaken, every trailer bearing was lubricated with grease as opposed to the great number using visible oil reservoirs today. With these developments come changes in fleet practices as well.

Among terminal facilities a "merry-go-round" or drag line dock was an oddity reserved for a handful of giant operations and even the fork-lift truck had limited use. Ten years ago most loading was done with dollies and drawn at a labor cost that would be impossible today.

Enough of this chatter. The point is that in every phase of trucking operations things change a lot faster than we sometimes realize. We know of at least one large operator who is not satisfied with monthly or even weekly reports on the fleet's activities. By noon every day he knows what happened *yesterday*.

Almost as a postscript we cannot help but add that Dach's quote applies to a magazine too. You've never seen the same article twice in COMMERCIAL CAR JOURNAL and if you ever get to see an issue ten years back (that's a tough one even for editors) you would note little if any resemblance to a current "production."

But there must be a final note of caution, another proven adage. Change for the sake of improvement, yes. Change for the sake of change alone, no!

Bart Rawson
Editor

Better protection against wear and rust

EVEN in winter-slushy weather, *Texaco Marfak* is miles ahead of ordinary lubricants in ability to give chassis parts long-lasting protection against wear and rust. This remarkable adhesive-cohesive lubricant *stays in* the bearings. Parts last longer, maintenance costs come down.

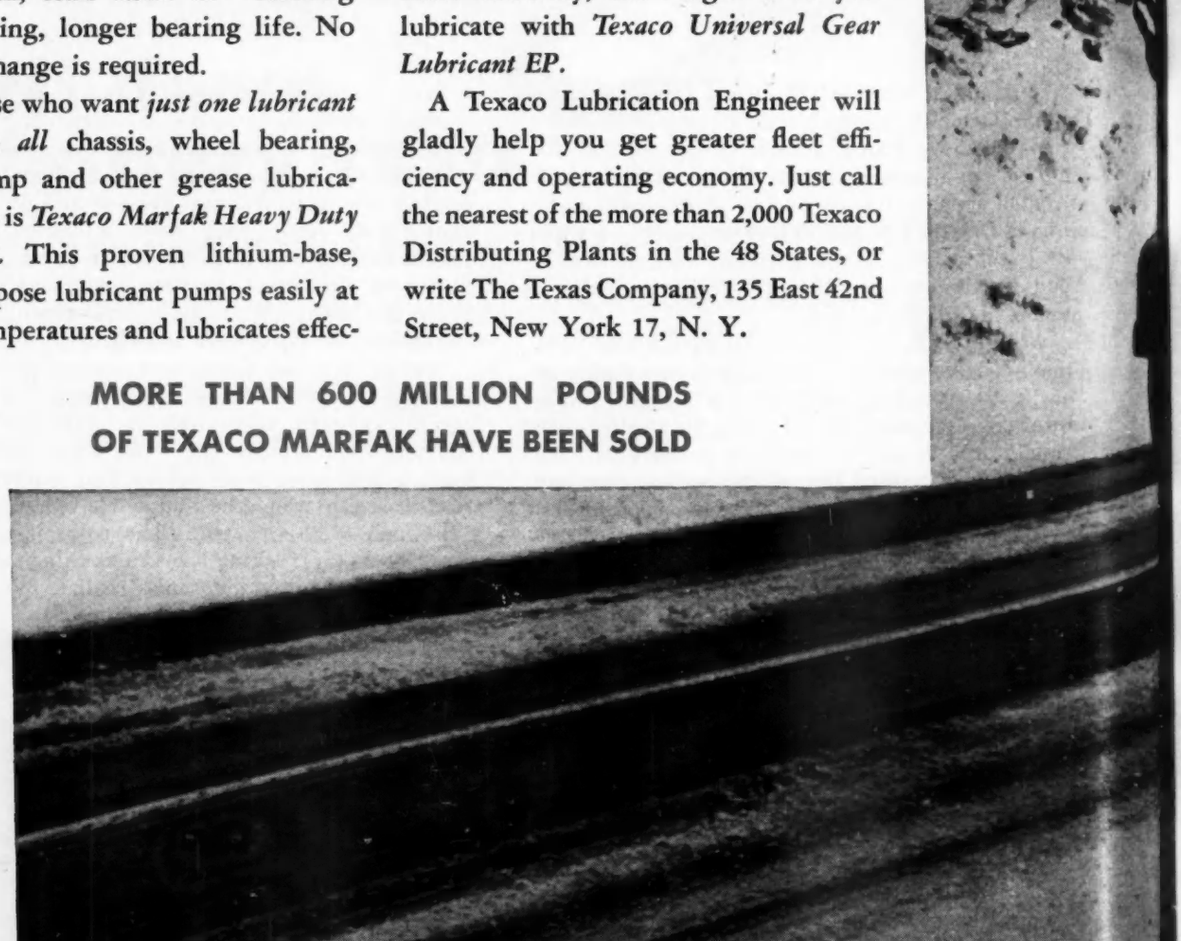
In wheel bearings, *Texaco Marfak Heavy Duty* gives extra thousands of miles of protection. It seals out dirt and road splash, seals itself in — assuring safer braking, longer bearing life. No seasonal change is required.

For those who want *just one lubricant* to handle *all* chassis, wheel bearing, water pump and other grease lubrication, there is *Texaco Marfak Heavy Duty Special 2.* This proven lithium-base, multi-purpose lubricant pumps easily at winter temperatures and lubricates effectively regardless of the thermometer. It resists water washing and stands up in severest service.

For engines—heavy duty gasoline or diesel—use *Texaco D 303 Motor Oil HD.* It assures top cleanliness, free rings for proper compression and complete combustion—*more power* with *less fuel* over *longer periods* between overhauls.

Transmissions and differentials run more smoothly, last longer when you lubricate with *Texaco Universal Gear Lubricant EP.*

A Texaco Lubrication Engineer will gladly help you get greater fleet efficiency and operating economy. Just call the nearest of the more than 2,000 Texaco Distributing Plants in the 48 States, or write The Texas Company, 135 East 42nd Street, New York 17, N. Y.



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JIMMY DURANTE
on TV Saturday nights.
METROPOLITAN OPERA
radio broadcasts
Saturday afternoons.

TEXACO

At Your Service

TIMELY NOTES ON MAINTENANCE AND OPERATION

by **MURRAY SIMKINS** Managing Editor

Corona and High Tension Cables

CORONA is a strange electrical phenomena which attacks high tension cables and reduces ignition efficiency. It is caused by the surge of high tension current through the circuit which builds up an electrical field around each cable. The field liberates oxygen in the air to form ozone, which in turn attacks the organic rubber of the cable insulation. The resultant loss which is often hard to spot deprives the spark plugs of their full charge and decreases engine efficiency.

Good cable care is the best means of keeping down this condition. Sharp bends in the cable should be avoided. The carriers or manifolds should be grounded and vibration should be reduced to the minimum. Protection should be provided against abrasion possibilities on metal surfaces. Cleanliness is very important as oil will attack nearly any type cable eventually and reduce its efficiency. Good ventilation around the cables is important and protection should be taken against the formation of moisture around the sockets in the distributor cap as well as on the wires.

Cylinder Head Warpage

ENGINE rebuilders advocate caution when removing cylinder heads. They suggest that both cylinder block and heads should always be checked during an engine job. Fleetmen know that many cylinder blocks will warp as much as .006 to .010 in. in service. Cylinder heads may warp as much as .015 in. A slight distortion will allow water to seep into the cylinders and cause serious engine damage. Resurfacing should be automatic when warpage is detected.

A word might be said for the torque wrench here—and the specifications that accompany every manual. Torqueing spex are as important as anything in the manufacturer's manual. And the recommended sequence in tightening head bolts will save many a warped head. You'll find warpage in spite of all precautions. But insist that your men use the torque wrench —when assembling and after the engine has been run at least five hours. It's good business.

Distributor Lubrication

IHC HAS changed lubricant specifications for the distributor shaft cam (at breaker lever rubbing block) from vaseline to a special cam and ball bearing lubricant.

This new lubricant is available in tube containers through IH branches and dealers. The part number is 1912969. It has been selected because of its high melting point and exceptional low cold test characteristics.

In addition to its above qualities this special cam and ball bearing lubricant will reduce the possibility of fouling the distributor contact points caused when ordinary lubricants are used.

Truck Radio Installation Tips

CAREFUL placement of antenna and interchassis cables and the proper installation of all suppression parts is essential on all automotive radio installations.

The installer must be sure of good electrical bond at all grounding points. This is best done by both scraping away any paint at the grounding and by using the shakeproof washers or self-tapping screws provided.

Additional suppression may sometimes be required and it is suggested that copper braid be used to ground the hood to the fenders at the hinge and the fenders to the frame at any convenient spot. The engine to frame ground strap should be checked for good contact with both the engine and the frame. Moving the regulator suppressor condenser from the battery terminal of the regulator to the ignition

(TURN TO NEXT PAGE, PLEASE)

champ clamp

. . . is what they call AERO-SEAL Hose Clamps! The new quick-attach JET or REGULAR win all bouts with vibration, corrosion or *competition.* These smooth, wide, stainless steel bands never pinch or damage hose. The precision worm gear tightens with even pressure all around. You get a tight seal that stays put — won't snap open until you want to remove it. And it's re-usable over and over. Widest range of sizes for cars, trucks, tractors and industrial uses.

Insist on genuine AERO-SEALS for complete satisfaction, bigger profits, happy customers. Ask your jobber.

Aero-Seal JET
QUICK ATTACH HOSE CLAMP

and **AERO-SEAL REGULAR WORM GEAR HOSE CLAMPS**

BREEZE CORPORATIONS, INC.,
700 LIBERTY AVE., UNION, N. J.

CCJ At Your Service

Continued from Page 9

switch side of the ammeter will sometimes be of assistance.

The antenna may be mounted on either front fender. The antenna lead should be brought as directly as possible into the passenger compartment, across to a spot beneath the base of the radio frequency unit, and then lead up into the unit through a grommet in the bottom cowl plate.

Keep as much as possible of the inter-chassis cable in the passenger compartment. Don't permit any of it to dangle in the engine compartment. Use the chassis of the radio frequency unit as a shield for this cable by keeping the chassis between it and the engine compartment, where possible.—from Studebaker.

A Study of Ring Wear Rates

IN A STUDY of abrasive wear on piston rings, three engineers from the California Research Corp., Watson, Hanley and Burchell, have provided some interesting experience data gained in operating engines with radioactive piston rings under abrasive wear conditions. Their report to the SAE last year is briefed here.

When an abrasive particle enters an engine cylinder during the intake stroke, there is a high probability that it will remain air-borne because of the extreme turbulence and that it will leave the combustion chamber during the next exhaust stroke. If the particle impinges on the cylinder wall oil film during the intake or power stroke, there is a high probability that it will cause wear of the piston ring and cylinder wall during the next upstroke of the piston. The amount of wear depends upon the size of the particle and its physical properties.

If the abrasive is reduced in size as it causes wear, the amount of wear is relatively low. If the abrasive has sufficient strength to resist the high compression loads imposed during wear, its size does not change while it is in the engine. The only way to stop this type wear is to remove the abrasive by filtration, oil change or loss through leaks or consumption.

Airborne abrasives entering the crankcase are likewise harmful unless removed. The wear rate depends upon the number of particles

(TURN TO PAGE 12, PLEASE)

"He wants breakfast brought out. Won't leave the truck a minute—since he got a full-depth Airfoam driver's seat!"

COMFORTABLE DRIVERS are better drivers – and you can't beat full-depth AIRFOAM for smothering bumps, relaxing cramped limbs and keeping the boys on the beam.

THAT HELPS FLEET OWNERS' PROFITS – and because AIRFOAM outlasts other type cushionings, you get a bonus of operational savings!

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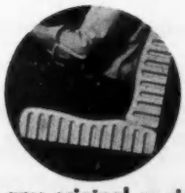

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The World's Finest, Most Modern Cushioning

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HUTCHENS TANDEMS *are economical*

REQUIRES LUBRICATION ONLY TWICE A YEAR!

Fully Guaranteed One Year plus these big value advantages:

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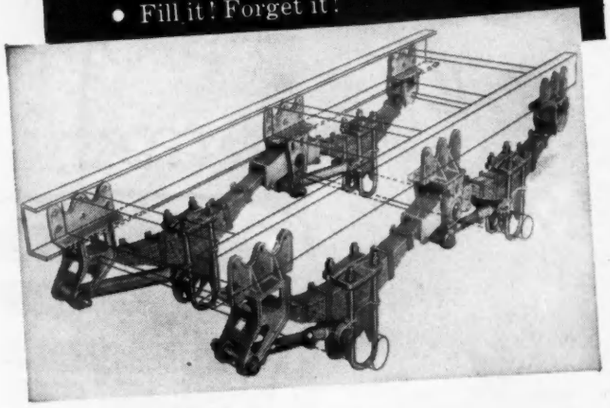

The original Hutchens tandem offers more safe, dependable roadability than any other suspension unit. Its smoother ride protects cargo and equipment. There's a variety of lightweight models with performance and prices you'll like. Ask your dealer.

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- The Ness Company 365 W. Cottage Place York, Pennsylvania
- E. J. Ketchum 2552 E. Gage Avenue Huntington Park, California

CCJ At Your Service

Continued from Page 10

present, the engine speed, and the ratio of the volume of oil in the critical wear zones to the crankcase oil volume. Low internal strength abrasives show decreasing wear rates as they are consumed. This type abrasive causes excessive wear of the lowest compression ring and then proceeds upward on the piston to the remaining compression rings as the lower rings lose tension and are less subject to wear.

Noisy Rocker Arms

CASES of squeaking exhaust rocker arms in the Plymouth 227-in. engine might be caused by a lack of lubrication of the push rod socket. However, it should be made certain that the oil feed hole is drilled completely through the rocker arm as well as the rocker shaft. These holes can be checked with a length of small wire. The oil holes in the arm and shaft are not designed to index and it will be necessary to rotate the screw end of the arm downward by hand to index the feed hole in the arm with the hole in the rocker shaft.

Another possible cause of noisy rocker arms could be caused by an insufficient amount of oil passing from the shaft to the arm through the clearance of the shaft and the arm.

A third possible cause involves either number 2 or number 4 cam bearings. If the bearing does not index properly with the oil passages to the head and cylinder block, an inadequate amount of oil will be supplied to the rocker arm causing the complete bank of arms to be dry.

Determine whether or not oil is present by idling the engine slowly and slightly loosening number 2 head bolt on the left bank and number 4 on the right bank. Bolts should be loosened cautiously to prevent oil spray if there is normal pressure.

The Future of Supercharging

SUPERCHARGING is one of the best means of obtaining power from a spark ignition engine, according to E. T. Vincent and F. L. Schwartz of the University of Michigan. In discussing the future of supercharging, they reported at the SAE National Meeting that

(TURN TO PAGE 14, PLEASE)

Regula

When you can ge
mileage, premiu
that's news. And
The Lee Super
of best-grade na
flat contour trea
distributes the lo
engineered for g
Lee's special
tween every ply—
the plies, reduce

LEE RU

OUT OUR WAY **by J. R. Williams**

DON'T YOU EVER KNOCK ON A DOOR ?
WELL, I THOUGHT YOU'D LIKE TO SEE HOW GOOD THIS LEE SUPER DE LUXE MILEAGE REPORT LOOKS AN'-- UH---
JOE KNOWS TH' BULL KNOWS TH' LONG MILEAGE LEE SUPER DE LUXES GIVE! HE'S JUST TRYIN' TO CATCH HIM DOIN' SOME PLAIN AND FANCY LOAFING!
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THE PEEKABOO
J.R.WILLIAMS

MORE MILES PER DOLLAR

Regular-priced Lee Super DeLuxe Highway Tire gives extra recaps, too

When you can get a regular-price tire that gives you premium mileage, premium features, and premium performance—*that's news*. And that's a shrewd tire buy, as well!

The Lee Super DeLuxe Highway is such a tire. It's made of best-grade natural Smoked Sheet rubber with a deep flat contour tread that puts more surface on the road, distributes the load, adds extra mileage. Its tread design is engineered for great traction, long life, cool running.

Lee's special Lubri-Cushions—thin sheets of rubber between every ply—are a premium feature, too. They lubricate the plies, reduce internal friction, and protect against bruise breaks by equalizing the flexing strain over the entire road impact area. Still another premium feature is that all cords are treated by Lee's exclusive Flexlok process. This reduces heat, minimizes tire growth, and makes cord separation from the rubber bond practically impossible.

The Lee Super DeLuxe Highway is available in Double-Life rayon or nylon cord. It is an outstanding truck tire buy.

* * *

The complete Lee line, shown below, includes a tire which will lower *your* operating costs by giving longer life, more recaps. Let us prove it to you.

LEE RUBBER & TIRE CORPORATION **CONSHOHOCKEN, PA.**

How one fleet operator

SPRAY-CLEANED 65 TRUCKS

with ONLY 5 lbs. of Oakite material

Trucks were lined up bumper to bumper at one fleet's garage—65 of them altogether, many abreast and in many rows. Elbow room was at a premium. Yet washing them was a cinch—when "mechanized" Oakite cleaning techniques were used!

First, a handy Oakite Foam-Spray Unit was mounted on a dolly and filled with a heated solution of Oakite Composition No. 70. Then, as one man applied thick deposits of detergent foam to the sides of each truck, a second man brushed the clinging lather lightly over each truck's surface. A third man completed the cleaning operation with a quick pressure rinse.

Results? In one evening, all 65 trucks were cleaned sparkling bright and streak free! Moreover, the entire cleaning job required only *five* pounds of cleaning material!

Amazing results like these are not at all unusual when truck-washing is "mechanized" the Oakite way. No other cleaning technique can give you such effective results so quickly and economically. Why not look into Oakite "mechanized" cleaning methods for *your* fleet? An attractive folder, prepared by Oakite, gives you complete details. Call your local Oakite Man today for your FREE copy—or write Oakite Products, Inc., 26D Rector Street, New York 6, N. Y.

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OAKITE
MATERIALS · METHODS · SERVICE
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At Your Service

Continued from Page 12

bmep's of up to 725 psi have been obtained through supercharging. Limitation to power output is generally the heat load accompanying the increased output.

Supercharging doesn't offer much, however, in the way of improved fuel economy, particularly if a mechanically driven supercharger is employed. The exhaust driven turbo-charger has a slight edge, they stated, but has poor torque characteristics. This may not be important with the use of torque-converter transmissions.

Improved performance with supercharged spark ignition engines can be best obtained through maximum use of higher compression ratio, maximum increase in the manifold pressure at present ratios or part compression ratio increase and part manifold pressure increase. The first provides for improved fuel economy; the second, best power output per cubic inch; and the third gives a combination of these effects.

The use of supercharging will depend upon the cost of the units to a great extent, the authors stated. In the past it has been cheaper to bore out the cylinder to get more power than to employ the charger. Mass production methods, however, applied to the units might bring down costs and make them more popular with designers.

What's New?

A new **dual runner, twin four-barrel intake manifold** is now available as an alternate manifold on the Dodge D-500 engine. The cast dual runner intake manifold, with two four-barrel carburetors, mounted fore and aft, is available as an alternate on all D-500 models.

The Electric Auto-Lite Co. has developed a new **resistor spark plug** with "power tip" featuring a protruding insulator nose which puts the spark gap nearer the center of combustion and provides a much longer fouling path. The extended ceramic tip permits the power tip spark plug to be hotter at low speeds and cooler at high speeds.

UP FRONT WITH CCJ

FEBRUARY, 1956, FLEET HIGHLIGHTS AS REPORTED BY COMMERCIAL CAR JOURNAL

MR. EXECUTIVE, the 1956 election-year Congress convened on schedule last month, but—up to press time—most of the activity was behind-the-scenes. Busiest topic was highways (reported in full, page 20, this issue). The Administration's request for postponement of scheduled reductions in excise and corporate income taxes was seconded by some Congressmen. Feeling is that a balanced budget is more important than tax reductions especially in times of economic prosperity. As of late last month, no hearings had been scheduled on transport policy revision legislation. Further evidence that the Administration would not insist on the complete "package" was given at last month's Transportation Outlook Conference of the U. S. Chamber of Commerce. At that meeting, Undersecretary of Commerce for Transportation Louis Rothschild said, "We have no illusions or notions that it represents the final answer and stand ready to assist the Congress in any way possible to perfect the suggested legislation."

EMERGENCY BRAKE regulations could be a deterrent to safety and a discredit to the ICC, said ATA's Executive Committee at its meeting middle of last month. In a resolution, it asked the formation of a fact-finding committee, including all interested parties, to conduct a test program to provide specific data as to the best braking systems to prevent runaways. Formation of such a committee was seconded by Ernest Cox, chief of ICC's Motor Carrier Safety Section, late last month at the annual convention of Truck-Trailer Manufacturers Assn. Noting that the problem needs immediate further discussion, Cox suggested the committee's first aim would be to find an interim means of providing at least some added brake protection (presumably vehicle-by-vehicle control) and then develop a permanent emergency brake system acceptable by all concerned. Cox's proposal demonstrates ICC's willingness to seek the right answer even in the face of great pressure for immediate elimination of brake failure and the resulting catastrophic runaway accidents.

TRUCK SALES in 1955 were split about 19 per cent for the independents and 81 per cent for the Big Three (Chevrolet-GMC, Ford and Dodge), showing an increase in the independent's share of the market as compared to 1954 when the market was divided approximately 16 and 84 per cent. New truck registrations for 1955 are estimated at 1,055,000 (as compared to the record set in 1950 of 1,142,307). W. C. Newberg, Dodge president, says that new registrations in 1956 could set a new record. He notes that there are over 1½ million trucks in operation over 12 years old, says that scrappage alone could account for 790,500 new trucks in '56. Robert W. Black, White Motor Co. president, says 1956 new registrations of trucks above 19,500 GVW may well exceed 80,000 as compared with the 79,300 registered last year, highest on record.

DETROIT DISPATCH

BOEING'S GAS TURBINE engine now has a specific fuel consumption of 1 lb per hp per hr as compared with the first model's 1.8 lb per hp per hr. Weight of the latest model is 320 lb with accessories, 80 lb heavier than the original. Horsepower has been increased from 175 to 240. Boeing says further fuel economy is necessary, is doing no truck testing at present.

L'UNIVERSELLE, GMC'S front-drive, "dream" delivery truck, is scheduled for production this year, said GM President Harlow Curtice during the Senate's recent monopoly hearings.

FRUEHAUF TRAILER CO. HAS acquired Strick Co. and its subsidiary, Strick Plastics Corp., giving Fruehauf a sizeable interest in the plastic trailer field. Strick will operate as an autonomous unit, including its present sales organization, according to the announcement.

NEW "TYPE C" AUTOMATIC transmission oil (page 18, Jan.) is not recommended for temperatures below minus 10. Performance under high temperature conditions is more satisfactory than that of the conventional Type A, says GMC.

CHEVROLET FOR '56 features a "Power-matic" automatic transmission (page 90, this issue). Still to come within another month is a new large truck—up to 50,000 lb GCW. It will use a 322-cu in. V8 engine, will be offered with the new automatic transmission.

WARD LAFRANCE TRUCK Corp. has been sold to Glen Alden Corp., Wilkes-

WASHINGTON RUNAROUND

ATA CONVENTION hotel registrations can be made through Miss Sylvia Peltonen, N. Y. Convention and Visitors Bureau, 90 East 42nd St., New York 17, N. Y. Convention dates are Oct. 21-26.

WESTERN RECIPROCITY agreement has been signed by nine states—California, Oregon, Washington, Idaho, Montana, Colorado, New Mexico, Nevada and Kansas. The plan (Dec. '55, page 20) provides for proportionate distribution according to highway use among the signers of commercial vehicle highway fees and taxes.

TWO NEW Commissioners have been approved by the Senate for the ICC—Rupert L. Murphy and Robert W. Minor. E. F. Hamm, Jr., has returned to the Commission as acting managing director pending appointment of a permanent replacement for M. N. Hardesty, who served about one month.

A TRUCKING FIRM IS small enough to be considered for Small Business Administration loans and other assistances, says the agency, if its annual income is not more than $2 million.

LEASING REGULATIONS AFFECTING duration and compensation of leases have been postponed until July 1. ATA's Private Carrier Conference is pushing for passage of SB 898. It would permit private carriers to lease vehicle and driver to an authorized for-hire carrier for the return haul.

ATOMIC-POWERED ocean vessel proposed by President Eisenhower would be built as a trailership if a bill (HR 8289) introduced by Representative VanZandt of Pennsylvania is passed.

ILLINOIS TRUCK operators may consider asking ICC to specify mud flaps in its safety regulations. They would like an alternative to the highly specialized type now required by Illinois.

TRUCK RADIO RULES SHOULD be modified says ATA. It has asked the Federal Communications Commission to permit VHF (low band) users to use their assigned frequency for pick-up and delivery. The petition also asks that UHF users be allowed to switch to VHF when the area they serve cannot be covered adequately with the assigned UHF frequency.

Barre, Pa. Glen Alden, a coal company, began its diversification producing air-conditioning equipment, plans to continue operating Ward LaFrance under its present name.

DESPITE GMC'S AIR SUSPENSION tractor (Jan., page 90), two other large truck makers are working with steel spring suppliers to develop a softer ride yet retain durability of steel. One possibility being investigated is passenger car practice of longer, wider springs with fewer leaves.

BONDED INSULATION IS featured in a new Fruehauf reefer trailer. The "Hasko-Strut" construction (Dec., page 84) consists of laminated panels made of Styrofoam insulation bonded to corrugated aluminum backing with a fiber glass reinforced plastic coating.

GENERAL FREIGHT

NOVEMBER 1955, intercity general freight volume hauled by truck was up 17 per cent over November, 1954, says ATA's Research Dept. The report is based on a special survey covering almost one-third of all Class I intercity common carriers of general freight. As compared to October 1955, November freight was down less than 1 per cent. Each of the nine geographical regions showed an increase for November 1955 over November 1954. Highest gains were in the Central region (24.7 per cent), Midwestern region (21.8 per cent) and Northwestern region (18.3 per cent. During the first 11 months of 1955, intercity general freight was up 14.4 per cent over the same period in 1954.

Month	% Change from Previous Month	% Change from a Year Ago
November, 1955	− 0.9	+17.0
October, 1955	+ 1.5	+19.2
9 Months, 1955	....	+14.0
September, 1955	+ 1.2	+17.0
August, 1955	+21.3	+20.9
July, 1955	−11.6	+ 8.7
6 Months, 1955	....	+14.2
June, 1955	− 0.9	+13.2
May, 1955	+ 0.2	+22.0
April, 1955	− 5.0	+13.0
3 Months, 1955	....	+12.2
March, 1955	+17.0	+13.0

PIGGY-BACK WILL move into the container field if plans by ACF Industries, Fruehauf Trailer and Clark Equipment are successful. ACF is producing a new 35-ft flatcar which will handle one trailer or two Fruehauf containers (Dec. '55, page 154). The containers can be switched from the flatcar to a flatbed trailer with a new design Clark lift truck. Trailer Train Co., new organization formed to lease cars to piggy-backing railroads (Jan., page 19), has ordered 1000 of the new rail cars and the Chicago Rock Island & Pacific 50 more.

ICC HAS been asked to rescind its order requiring Class I common and contract carriers of intercity motor freight to report annually freight statistics on shipments of 10,000 lb or more. The order went into effect first of last month.

ATA'S EXECUTIVE COMMITTEE HAS alerted the ATA staff to watch for ICC decisions which would put into effect changes in the National Transportation Policy as proposed by the Cabinet Committee Report without Congressional action.

IN THIS ISSUE . . .

You'll get many ideas on what you want in a **TRACTOR-TRAILER SHOP** from this composite view of over 100 fleet shops visited by CCJ's editors (page 66).

There are many **MAINTENANCE COST** reduction ideas. For **BUS** men, Chicago Transit's G. J. Clark outlines his fleet's 8-point long-range program (page 72). You'll be surprised at what he says can be done through extending **PARTS MILEAGE** and **SALVAGE.** Grandview Dairy explains how it uses **OUTSIDE EXPERTS** to keep its shop down to a reasonable size (page 76). From the SAE Annual Meeting; here's a report on what several fleets do to get **MORE MILES PER MAINTENANCE DOLLAR** (page 80).

A scale maker suggests how **ELECTRONIC LOADING** might increase your payload 6000 lb per trip (page 74). Professor Barloon takes a look at the **LONG RANGE FUTURE,** says trailer freight alone will be 443.8 billion ton-miles a year by 1975 as compared to 181.4 in 1955 (page 82).

NEW DEVELOPMENTS described include **CHEVROLET'S** 1956 line and the "Powermatic" **AUTOMATIC TRANSMISSION** (page 90), **TRANTER'S** 410-lb **REEFER SYSTEM** (page 92) and **DODGE'S** ½-ton **"TOWN WAGON"** (page 92).

The Road Ahead

HIGHWAYS resulting from any expanded federal-aid highway program passed by Congress this year will probably be financed by increased highway-user taxes. Although several bond issue financing measures are still eligible for committee consideration, they are not likely to be reported out in view of the Administration's OK of pay-as-you-go financing.

CONGRESSMAN FALLON'S bill, H.R. 8836, is most likely the one to be debated on the floor of Congress after being worked-over by the House Public Works Committee. This bill contains no financing provisions, leaving the problem of developing these to the House Ways and Means Committee. Fallon's bill includes a 13-year, $25 billion (including $175 million regular federal-aid already authorized) program for the Interstate System, with a 90 per cent federal and 10 per cent state matching formula. Other federal-aid highway systems would be increased an additional $25 million each year over a 10-year period retaining the present 50-50 formula.

SIZE AND WEIGHT FREEZE is included in the Fallon Bill. Vehicles would be limited to sizes and weights in effect on March 1, 1956, or AASHO specifications. Federal-aid would be denied states permitting greater limits. It could be some time before the bill is reported out of committee. The subcommittee considering the proposal has decided that states should be asked to make new estimates of their highway needs.

TWO OTHER BILLS. H.R. 7880 and 7884, have also been introduced. H.R. 7880 includes a size and weight freeze similar to Fallon's H.R. 8836. These bills also contain financing proposals, as do H.R. 7720, 7669, 7810 and 7659, left over from last year's Congressional session. While these bills probably will not be reported out of committee, they do give some idea of the probable increases that can be expected in highway-use taxes as summarized in the chart below.

AMERICAN AUTOMOBILE ASSN. has suggested its own highway program. It is a 15-year program split into three five-year phases. In the first five years, federal expenditure would be $5 billion for the Interstate System and $3.875 billion for other federal-aid highways. Proposed tax increases (shown in the chart), says AAA, would increase the truck's share of total highway revenues from 23.2 per cent to 26.2 per cent.

INCREASES IN regular federal-aid for highways are also being considered for the fiscal years ending June 30, 1958, and June 30, 1959. A bill, introduced by Rep. McGregor, asks for $175 million a year for the Interstate System and $800 million a year ($100 million more than at present) for other highway federal - aid. Matching formula would remain the same as at present.

	Gas (per gal)	Diesel Fuel (per gal)	Trucks, Buses and Trailers (On Mfrs. list price)	Tires			Camel-back[1] (per lb)	Inner Tubes[2] (per lb)
				7.25-8.50 (per lb)	Over 8.50 (per lb)	Other (per lb)		
Present rates	2¢	2¢	8%	5¢	5¢	5¢	.....	9¢
H.R. 7720	2¾¢	3¢	10%	8¢	10¢	5¢	.....	10¢
H.R. 7669	2½¢	3¢	10%	6½¢	10¢	5¢	7½¢	12¢
H.R. 7810	2½¢	3¢	10%	.....	9¢	7¢	.....	.....
H.R. 7659	3¢	3¢	10%	6½¢	10¢	5¢	7½¢	12¢
H.R. 7884	3¢	3¢	10%	8½¢	8½¢	8½¢	.....	12½¢
H.R. 7880	3¢	3¢	10%	8¢	10¢	7¢	10¢[3]	14¢
AAA[4]	2½¢	4¢	.....	(5)	(5)	(5)	(6)	(7)

[1]—Camelback means material used in recapping or retreading tires. Tax applies to tires with crown width of 6 in. or more. [2]—Inner tubes for tires with more than 8½-in. cross section. [3]—Weight of entire recapped tire taxable. [4]—Also includes 7¢ per gal on lube oil. [5]—6¢ per lb on tires under 45 lb, 10¢ per lb on tires 45 lb and over. [6]—1¢ per lb on tires under 45 lb, 5¢ per lb on tires 45 lb and over. [7]—10¢ per lb on tubes for tires under 45 lb, 14¢ per lb on tubes for tires 45 lb and over.

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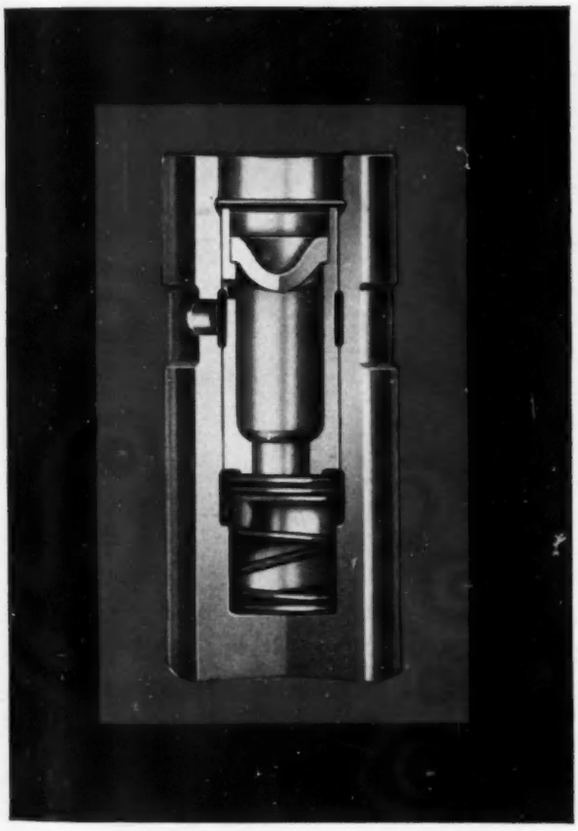

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CCJ BULLETIN BOARD

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Next to driving good, squawking good is about the most important thing a driver can do to cut operating costs. These daily vehicle inspection reports give you leave to cuss politely and effectively—may save you hoofing it in the end.

Trouble is not all drivers know the how, when or why of effective squawking. Instead of listing specifics, some head for the miscellaneous column—cover the water front with "No damned good."

This may be true, but it gives the shop little to go on when they go after your vehicle report. So you get it the next day—still no damned good. Worst of all, it won't be any better probably until you tell 'em exactly what your beef is.

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Diner Waitress: "I really got the scare of my life last night. I was out with an inebriated truck mechanic and he headed right for a telephone pole."

Diner Cook: "The dog!"

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Traffic Cop: "You passed three stop signals, didn't make a boulevard stop, were over the center line, and exceeding the speed limit. Now, what have you to say for yourself?"

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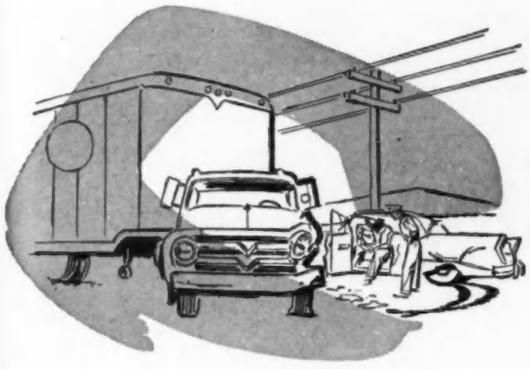
Resume Work

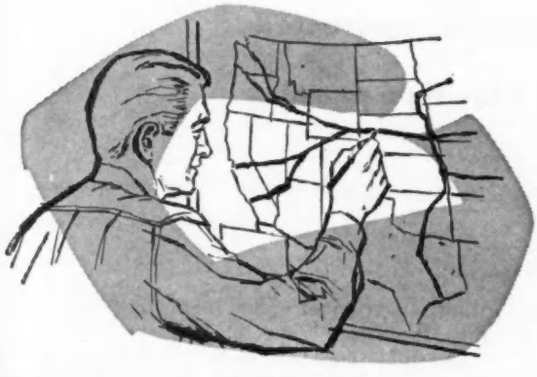
5 ways that TACHOGRAPHS can improve your fleet operation

The Tachograph is a recording speedometer easily mounted on the vehicle's dashboard. It permanently records on a wax chart the time the vehicle started, when it stopped, when it idled, speed and distance traveled.



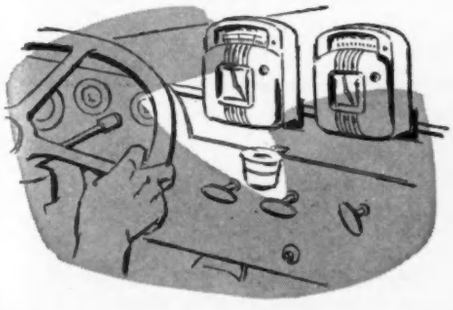
1 IN CASE OF ACCIDENT—the Tachograph will tell how fast the vehicle was moving... time of accident... when travel was resumed. Location of accident can be verified. Tachograph charts are often used to substantiate driver's testimony in court cases involving accidents or speeding.

2 CUTS UNSCHEDULED STOPS—Tachograph tells when vehicle made unscheduled stops... for how long... when travel was resumed... how fast vehicle traveled before and after such stops. It can show how far off schedule the vehicle was and how many unscheduled stops were made in any 24-hour period.



3 PROVIDES BETTER ROUTING DATA—Tachograph can help determine the best routing for normal, "express" or special runs. It will indicate where traffic tie-ups are likely to occur, where slowdowns are necessary due to terrain. It can provide the basis for scheduling new runs.

4 LOWERS OPERATING COSTS—Tachograph verifies drivers' pay records (hours or miles), overtime reports, delays in loading or unloading, showing time and location. It helps control the speed of a vehicle... saves gas—oil—tires. It can be helpful in reducing the number of reportable accidents which in turn can lower insurance rates.



5 R.P.M. MODELS, TOO—A Tachograph scaled to indicate R.P.M.'s instead of miles per hour will tell a driver when to shift gears so that he can avoid abusing the engine through overspeeding, "lugging" and improper shifting. An R.P.M. Tachograph is the ideal companion for the M.P.H. unit to give a complete record of your vehicles.

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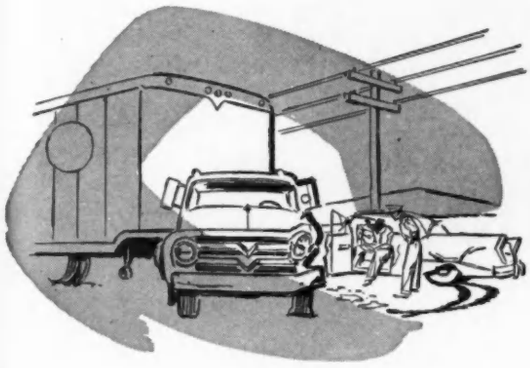
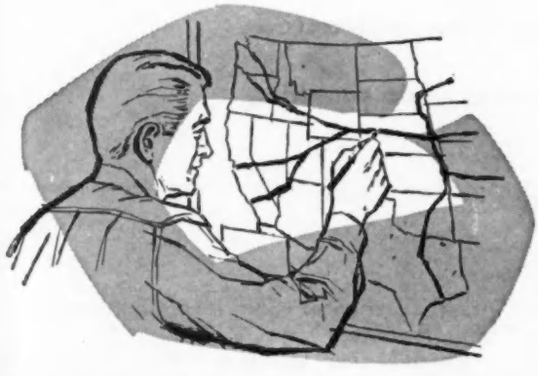


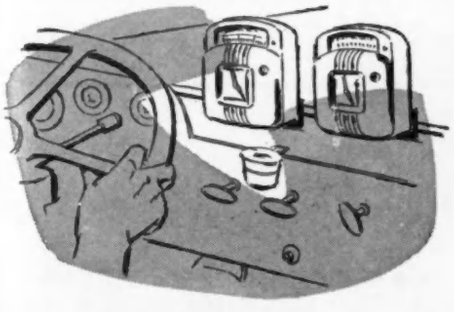
1 IN CASE OF ACCIDENT—the Tachograph will tell how fast the vehicle was moving... time of accident... when travel was resumed. Location of accident can be verified. Tachograph charts are often used to substantiate driver's testimony in court cases involving accidents or speeding.

2 CUTS UNSCHEDULED STOPS—Tachograph tells when vehicle made unscheduled stops... for how long... when travel was resumed... how fast vehicle traveled before and after such stops. It can show how far off schedule the vehicle was and how many unscheduled stops were made in any 24-hour period.



3 PROVIDES BETTER ROUTING DATA—Tachograph can help determine the best routing for normal, "express" or special runs. It will indicate where traffic tie-ups are likely to occur, where slowdowns are necessary due to terrain. It can provide the basis for scheduling new runs.

4 LOWERS OPERATING COSTS—Tachograph verifies drivers' pay records (hours or miles), overtime reports, delays in loading or unloading, showing time and location. It helps control the speed of a vehicle... saves gas—oil—tires. It can be helpful in reducing the number of reportable accidents which in turn can lower insurance rates.



5 R.P.M. MODELS, TOO—A Tachograph scaled to indicate R.P.M.'s instead of miles per hour will tell a driver when to shift gears so that he can avoid abusing the engine through overspeeding, "lugging" and improper shifting. An R.P.M. Tachograph is the ideal companion for the M.P.H. unit to give a complete record of your vehicles.

Please send us a FREE COPY of Booklet SU-91

Wagner Electric Corporation
6476 Plymouth Ave., St. Louis 14, Mo.

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So You're PLANNING a Tractor-Trailer Shop

This one has never been built, but it incorporates the experience of many fleets, provides an easily added-to or subtracted-from workable basis for your shop planning

By Bart Rawson, Editor, Commercial Car Journal

If you are an average fleetman planning a new tractor-trailer shop or rebuilding an old one, chances are that you will take two and often three initial steps to help your architect or builder with the actual planning and construction.

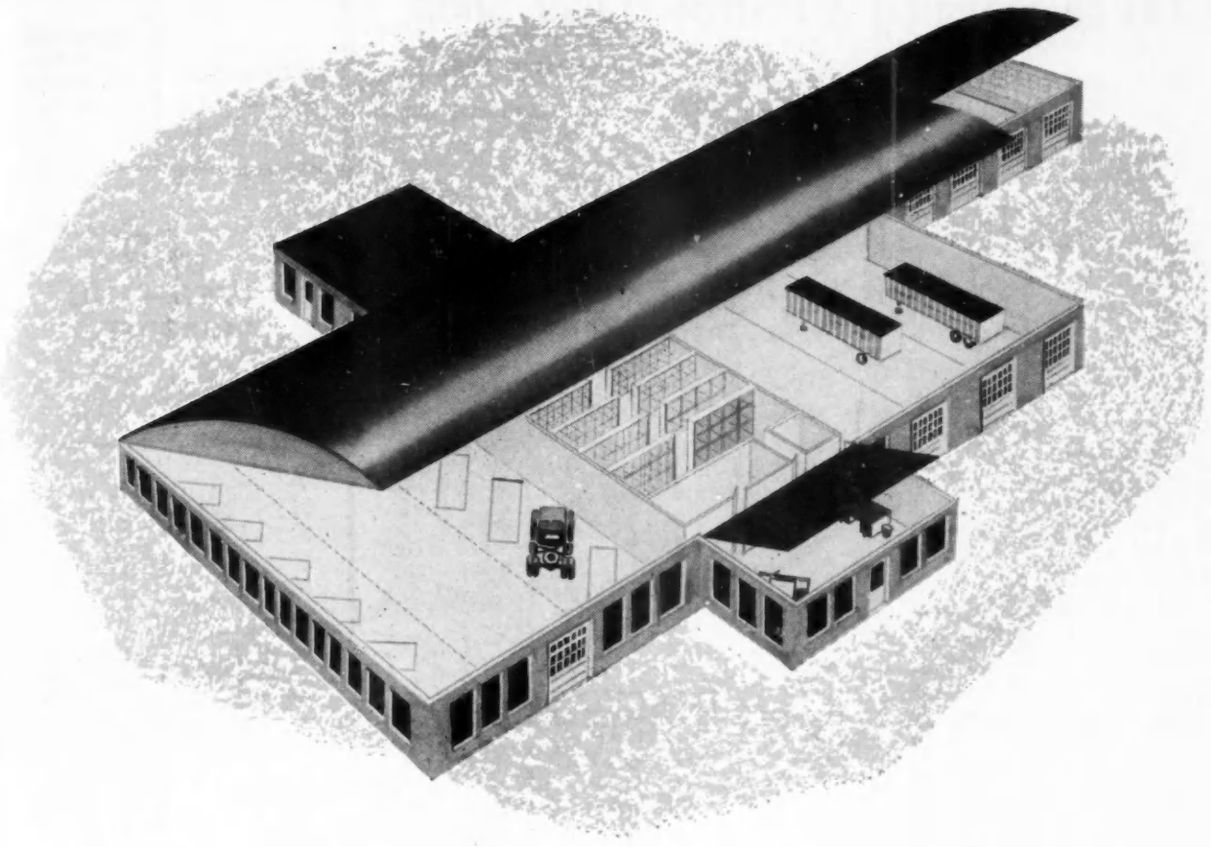
First, you will assemble your own ideas, usually in the form of a series of rough sketches or layouts based on your own operating experience. This is always the most important step.

Second, you will visit other shops. Of course, the closer to your own operation these others are, the more valuable the ideas they suggest will be to you.

Third, you will hunt for back issues of *Commercial Car Journal* to study the great many layout plans and picture sequences which

THE SHOP that you are looking at on these and following pages has never been built. It is no one shop in particular. Rather, it is a composite of more than 100 shops which CCJ's editors have visited within the past two or three years. We have incorporated some ideas from nearly all of them plus a few ideas of our own based largely on "mistakes" which maintenance men have told us about.

Our composite shop has several basic features. The details are extremely simple in the belief that it is easier to build "up" rather than "down." It is arranged on a "unit" basis which can be added to or subtracted from, depending on the size and needs of your fleet. For instance, you can include from one to a dozen trailer repair lanes, as many inspection areas as you need, and so on down the line. Furthermore, each of the basic elements can be altered to suit particular requirements and all can be rearranged physi-



have been published about other shops. Unfortunately, these get scarcer as the years go by.

It is to fulfill the third step and to lend what we hope will be a material assist in the first and second that this story has been undertaken. It considers layout only. In future issues, we hope to discuss further details as well as a shop for smaller trucks.

cally to fit limitations which the size and shape of a particular property may dictate. This particular plan presupposes unlimited maneuvering space both in front and behind the shop, and is so designed that all traffic moves from front to rear.

A little later on we would like to discuss some basic ideas which may help to determine just how big a shop should be to fit a given set of circumstances. But right now, while our type matter is still adjacent to the layout plans, we would like to get started on a discussion of individual sections.

200 Tractors, 300 Trailers

Suffice it to say here that we believe that this shop is about the right size to handle a fleet of approximately 200 tractors and 300 trailers operating from a central location with an average annual mileage of about 50,000 miles per powered vehicle. Please remember that it can be adjusted for either larger or smaller operations.

Deliberately, we have avoided specific details within most of the areas believing that these must be left to individual discretion and requirements. We have, however, designed the plant for all-weather operation. In southern climates it is conceivable that washing, tire maintenance, and many inspection procedures can be done outside, aided by newly developed portable equipment. But in most sections of the country during such a winter as we have been experiencing so far this year, open air activities of this sort are not conducive to maximum efficiency.

Now for a look at some of the more important features designed into our composite repair center.

Tractor Shop

At the extreme left of the plan drawing is a very simple tractor shop, 60x100 ft and fitted with an overhead door at each end. It provides ample working

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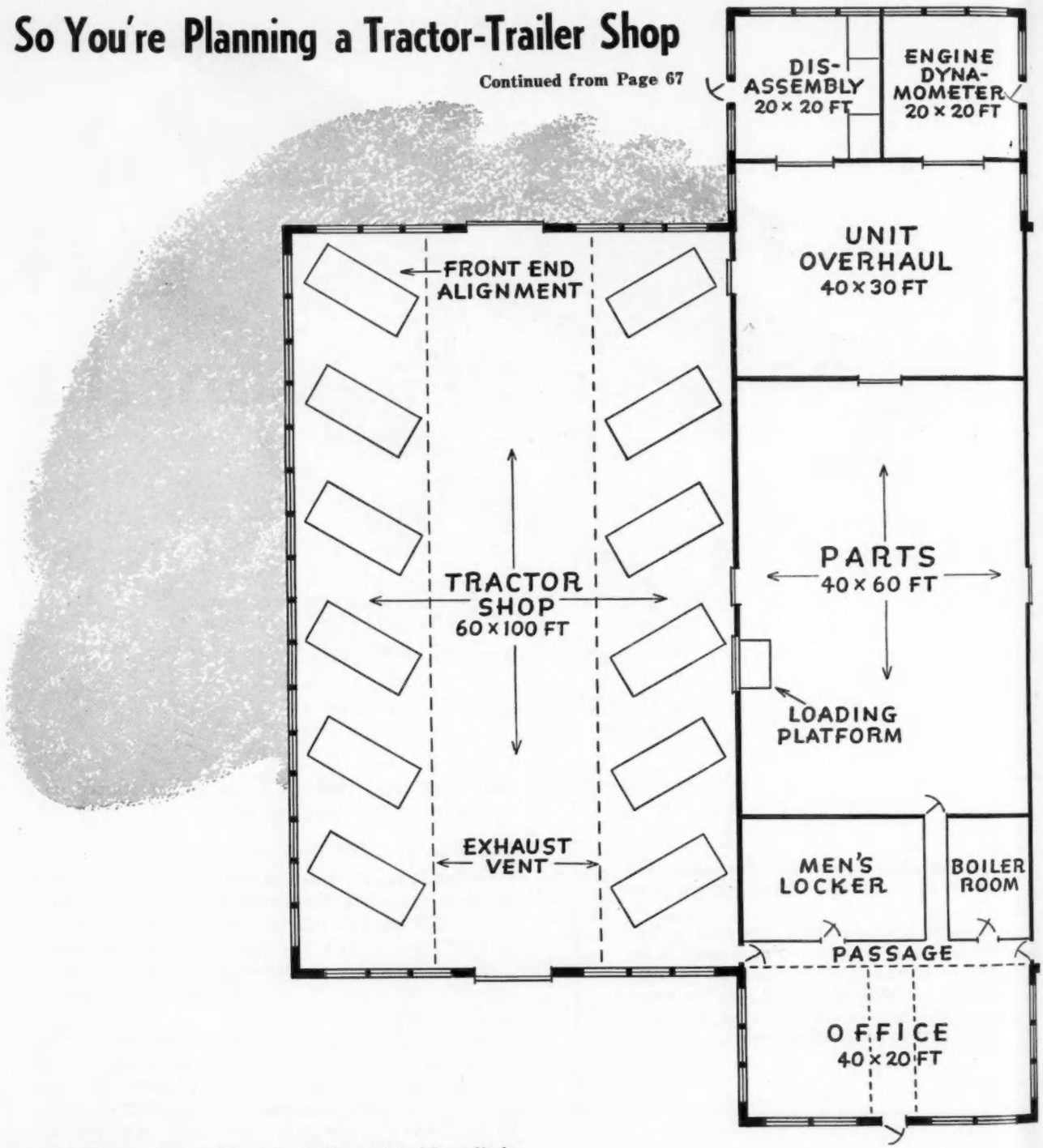
So You're Planning a Tractor-Trailer Shop

Continued from Page 67

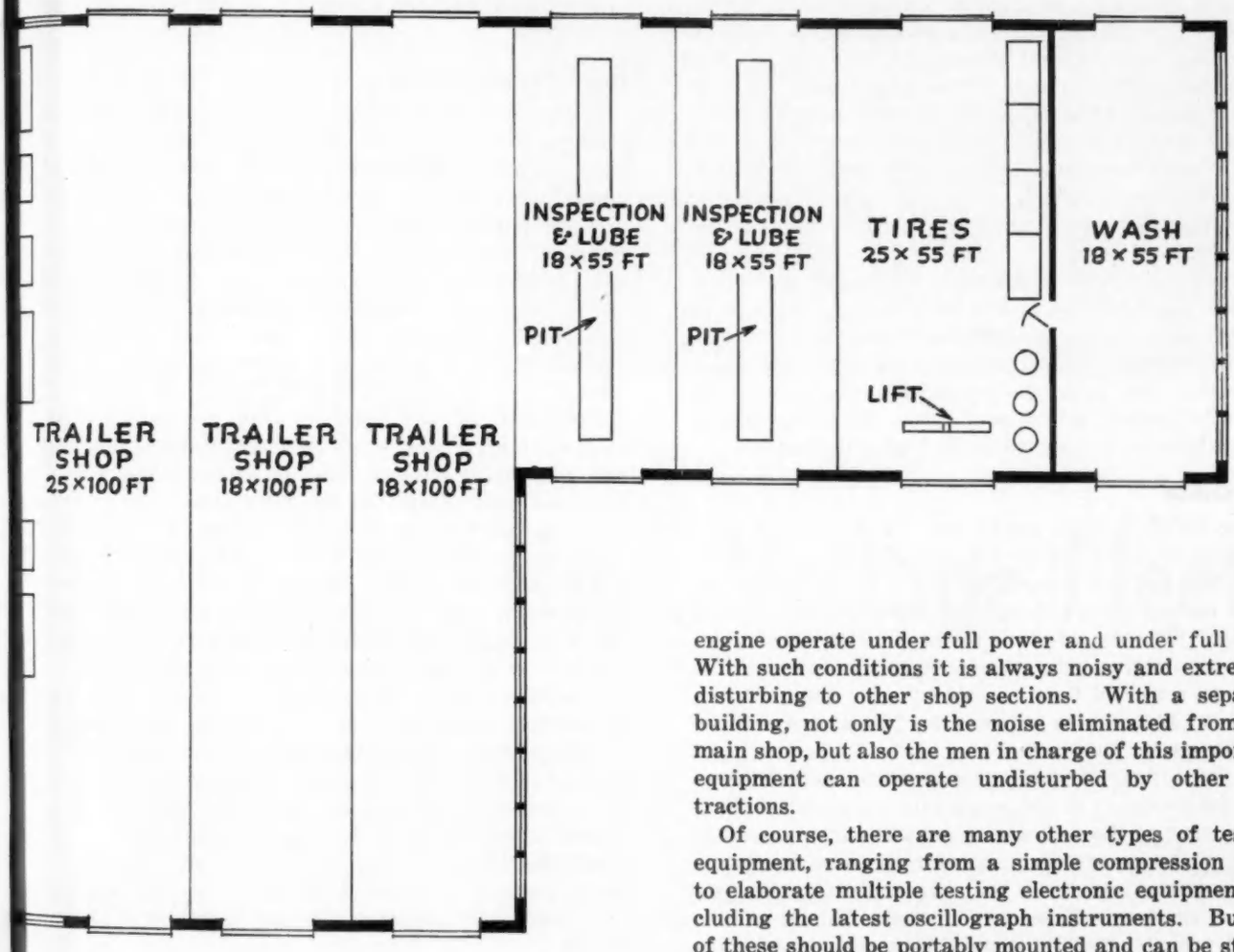


space for at least 12 repair stalls and, with a little crowding, can accommodate 14 vehicles. Aside from mechanics' work benches which can be either fixed along the walls or portable (many recommend the latter), it boasts only two pieces of major equipment.

One is a built-in exhaust ventilating system shown by dotted lines in the floor. All too often when planning for new buildings, fleetmen have neglected this feature and regretted it deeply. Unless you are in an area where doors and windows can be kept open all of the time, you are heading for trouble if you do not provide for an adequate exhaust system. These usually come in the form of a built-in floor duct under powerful suction and flexible hoses which may be attached to the exhaust pipe. An alternative is an overhead system, particularly suitable when vehicles are equipped with vertical exhaust stacks.

Second we have provided for a front end alignment machine. For heavy-duty work, this is usually the type which is provided with a shallow pit where men can work under the front end conveniently. Some will argue, of course, that they can operate without

YOU ARE INVITED to comment on this layout. As in the case of any shop that has had no grease on its floor, we know it has "bugs" and room for improvement. Please send us your ideas.



this equipment, using only a portable toe-in gage. But survey after survey has shown that those who pay strict attention to complete front end alignment, attain far greater tire mileage than those who do not, to say nothing of easier steering, better roadability, and resultant safer operations.

Note that the basic layout does not include space for a chassis dynamometer. A separate building is suggested for this purpose. In our travels we have found a surprising number of fleet operators who believe that this is the ultimate in testing equipment. But all have found that placing it within the main shop area has been a definite mistake. To be efficient the chassis dynamometer must let the vehicle's engine operate under full power and under full load. With such conditions it is always noisy and extremely disturbing to other shop sections. With a separate building, not only is the noise eliminated from the main shop, but also the men in charge of this important equipment can operate undisturbed by other distractions.

Of course, there are many other types of testing equipment, ranging from a simple compression gage to elaborate multiple testing electronic equipment including the latest oscillograph instruments. But all of these should be portably mounted and can be stored either in a corner of the tractor shop, in the parts area, or in the dynamometer building.

Parts Department

The parts storage area needs little discussion here. Its size, of course, is greatly influenced by the number of types and makes of vehicles in the fleet and by geographical location of the shop. Obviously, if you are in a rural area your stocks must be complete. But many fleets operating in metropolitan areas have reduced inventories to a minimum, using a parts "runner" on daily or even hourly schedules to local sources of supply.

The location of this department, however, can be important. Note that here it is centrally located with counter windows (which double as doors) on three sides leading directly to the tractor area, the unit overhaul shop, and the trailer shop. Note that a passage (just back of the office) has been provided

(TURN TO NEXT PAGE, PLEASE)

So You're Planning a Tractor-Trailer Shop

Continued from Page 69

between the tractor and trailer shops. This eliminates "traffic" through the parts department particularly in inclement weather, and permits an "off limits" rule to all but parts handlers. The larger door into the trailer shop and the small loading dock provide a convenient means of handling incoming parts. Admittedly this would occasionally tie up one tractor service bay but the feature provides for a completely protected unloading operation, highly desirable in sub-freezing weather.

Nearly always it is desirable to provide additional storage space for heavy and slow moving parts, such as complete engine assemblies, springs, and body parts. This can be accomplished in a balcony space when the office is on the ground floor as shown. Or it can be housed in basement space. In either case, a small elevator or dumbwaiter is highly desirable.

The Office

The 20x40 ft office, shown here on the ground level, provides minimum space for the maintenance superintendent and his record-keeping staff. It is so located that it commands a good view of conditions in front of the shop where inbound vehicles congregate.

An alternative with excellent merit is to locate the office on a second floor or balcony over the parts department from which windows provide a view directly into the major shop areas.

A third floor "tower" arrangement could be constructed as shown in the accompanying sketch, to provide a view of the entire terminal and parking area. It would make an excellent spot for the man in charge of scheduling vehicles to the shop and could also provide space for a dispatcher's office. This, however, would probably require a pneumatic tube installation between the dispatcher, the loading dock platform, and the drivers' "ready room."

Unit Overhaul Shop

To the rear of the parts department we have provided a modest 40x30 ft overhaul section. This is definitely too small for a fleet with heavy mileage and "production line" rebuilding. But it should be adequate for simultaneous rebuilding of at least one of each major component plus modest small parts overhaul.

Again it is desirable to leave its detailed equipment up to the individual fleet but it is presumed that it would contain a minimum of rebuilding stands for engines, transmissions, and rear axles, together with overhaul and test benches for electrical equipment, brake parts, fuel pumps, and other accessories. It is so located that it is immediately accessible to the parts department as well as to the tractor shop from which engines and other components can be conveyed either by an overhead crane, a fork lift truck, or hand dollies.

Don't Forget Diesels

If there are to be diesels in the fleet, it is extremely important to remember that a separate dustproof room should be provided for diesel injector and fuel pump maintenance. For this we suggest an optional area protruding into the parts department and deliberately located away from an outside wall. This aids in keeping out windblown dust. There should, of course, be an adequate ventilating system with fans and an air intake filter. The room need be large enough only to house the maintenance equipment needed.

Note that the unit overhaul shop has been located so that it protrudes 10 ft beyond the back building line, permitting window space on either side for daylight and ventilation. At the same time, this protrusion provides for the convenient location of two additional rooms which we believe are extremely important adjuncts to any efficient overhaul shop. One is the small area for disassembly and cleaning. All too often major components are taken directly to the overhaul shop, loaded with the accumulated grime of thousands of miles of operation. When a separate disassembly area is provided, dirt can be washed down the drain where it belongs and not deposited on the floor of the overhaul shop. Presumably, cleaning tanks and steam generating equipment would also be located in this disassembly area and this suggests the possibility that a concrete slab be provided outside the room as a convenient place for steam cleaning both parts and complete vehicles in the open when needed.

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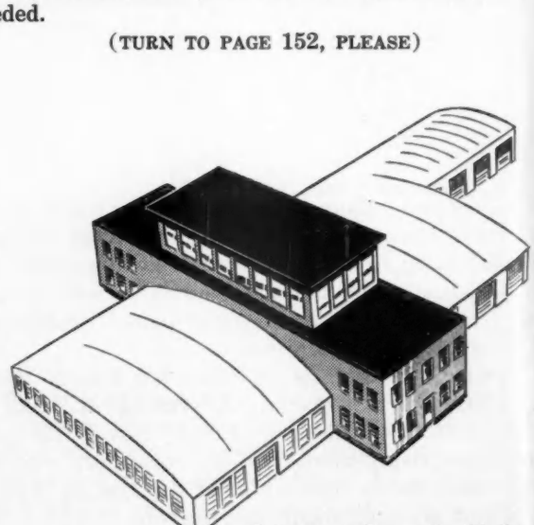

Third floor "tower" added to basic plan to provide spot for dispatching and shop traffic control

Serving 50 million customers, 1450 electric utility companies rely on . . .

High-Voltage Fleets

CURRENTLY serving more than 50 million customers, most of them residential, the electric utility industry relies on its truck fleets for constructing and maintaining endless miles of transmission and distribution lines and to assure prompt action on customers' service calls.

Compared with other truck users, the electric utility industry could hardly be called a major fleet operator. But, in a nation which places ever-increasing reliance on uninterrupted electric service in its industrial and home life, the utilities' service fleets play an important role. Their job is to move materials, equipment and skilled technicians where they're needed, when they're needed.

Trouble Wagons

When a customer reports service break-downs, or when storms or high winds play havoc with power lines, the utilities' service departments depend on their vehicles to get them to the trouble spots with a minimum of delay. Unlike some fleet operators, electric utility managers are happiest when their fleet's road mileage is held to a minimum.

Up-to-date operating information on electric utility fleets is not readily available. It is known that there are approximately 1450 electric utility companies, most of which operate at least a few vehicles.

King Size Fleets

Some of the largest fleets: American Gas and Electric Co., with 1410 trucks and 1231 passenger cars; Consumers Power Co., with 1400 trucks and an equal number of cars; Consolidated Edison, with 1317 trucks and 303 passenger cars; Niagara Mohawk Power Co., with 1307 trucks and 655 cars.

A survey conducted by the Automobile Manufacturers Assn. in January 1955 showed that fleets operated by 20 major electric utility companies included a total of 11,380 trucks, 195 semi-tractors, 1775 trailers and 8869 passenger cars.

Varied Equipment

Although most fleets have more trucks than passenger cars, the cars tend to have higher annual mileages. Many of the trucks, equipped with winches, power-take off units and mobile-workshop type bodies are most useful when they're standing still on the job. For the light service trucks, the main job is to provide technicians and their equipment a means of getting from one service call to another.

Fleet managers are maintenance conscious, find that money spent in keeping their fleet in good shape is well repaid in terms of better service to their customers. Also conscious of the public rela-

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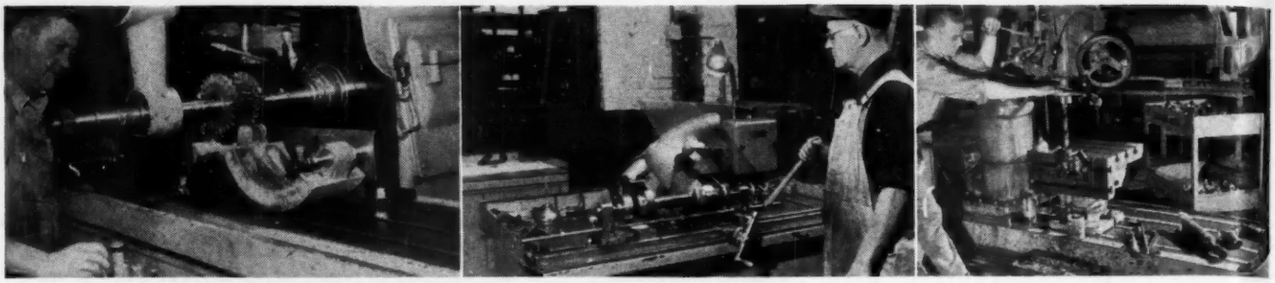

Salvage gets special emphasis at CTA. As shown above, from left, brake shoes are rebuilt, brake cams reconditioned, U-joints restored to original standards with special machines. Box at right gives several examples of savings from salvage for a one-year period. The last two items cover work done by outside firms for Chicago Transit

8-Point Program Sets New PM Goals for

By G. J. Clark
Asst. to Supt., Shops and Equip.
Chicago Transit Authority

IF MASS transportation is to survive, the cost of servicing and maintaining our coaches must be reduced to costs and man-hours much below those pars which have now been set as fundamental requirements, and which now have many of us wondering if we will ever be able to attain and still maintain our equipment to some degree of propriety.

Long range planning of maintenance routines may carry the penalty of short sighted policies that restrict progressive thinking. Plotting the course whose span covers over two years may run aground because of the unforeseen and rapid changes taking place in our present era. However, we have set the ball rolling in many avenues of maintenance with some long range plans that we hope will more than offset our rising costs of operation.

Eight-Point Program

The program generally falls into the following categories:

1. A system of production line maintenance set up on a "conveyor belt" type operation with highly trained specialists at each station.
2. Adherence to a program of volume purchases of rolling stock so as to achieve as reasonable a degree of standardization as possible under competitive bidding.
3. A procedure for selection of shop equipment designed for specific jobs.
4. More efficient use of the IBM machines for controlling shop operation through use of pertinent data.
5. Thorough and continuous training program for maintenance personnel.
6. Improved liaison between the transportation and the maintenance departments, the purchasing division and the stores so that specifications and working procedures can be set up to the benefit of all.
7. A continuing study of parts mileages with the objective that of increasing parts life and reducing down time.
8. A reclamation program that reduces parts scrappage to the bone.

It is with the program of reclamation and salvage that I wish to dwell at length at this time. For here already we can point to a considerable saving over the past several months. At the time the program was started it was agreed that reclamation would not interfere with items then being repaired, but would only consider items that were being scrapped.

The impact or psychological effect of this program was tremendous. Whereas the personnel had been scrapping parts and units and placing them in the rubbish pile, it became mandatory to send all such things through a central reclamation area, where close inspection showed many pieces were being scrapped for the lack of interest

RECLAMATION ITEMS	SALVAGE COST	NEW COST	SAVED
Differential Carrier & Cap.	$ 746.39	$ 2,975.48	$ 2,229.09
Brake Shoes	10,378.17	38,127.42	27,749.25
Brake Cams	8,546.02	23,599.09	15,053.07
Wheel Hub & Cap	1,320.83	3,431.06	2,110.23
Steering Knuckle King Pin	154.60	643.85	489.25
Trans. Rotor Shaft Installed	806.00	3,897.79	3,091.79
Engine Thermostat	167.00	1,111.38	944.38
Muffler	2,556.52	5,494.61	2,938.09
Clutch Forward & Reverse Collar	1,250.00	9,875.00	8,625.00
Clutch Air Cylinder Piston	64.38	287.04	222.66
Front Axle Steering Knuckles	10,435.67	57,910.43	47,474.76
Steering Sector Shaft	3,864.20	12,083.50	8,219.30
Muncie Reclamation	22,839.00	35.626.21	12,787.21
City Tool & Die	23,287.08	55,427.26	32,140.18

Maintenance program aimed at offsetting rising costs of operation, extending parts mileage offers opportunity to meet or better Transit Pars

and inspection. As soon as everyone learned that they would have to account for all pieces going through reclamation, a noticeable decrease in scrapped material was observed. Definitions were developed so as to control this potential condition.

1. *Reclamation* was defined as, "an experimental process to recover from scrap an item and develop a procedure whereby an economical and sound method of repair is made possible."
2. *Repair* was defined as, "to restore economically an item to as good as new, using procedures which experience has proven that the finished product is sound."

Accurate records are being kept on some 500 items as to the man-hours expended to overhaul units and buses in the various shops. This record indicates the efficiency of one shop against the other and also as a comparison to the industry.

A book on the mileages of 13 items is given out quarterly, which shows the number of pieces removed and the average and maximum mileages. These 13 items are: alternator, blower, compressor base, compressor head, differential, engine block, engine head, generator, voltage regulator, starter, steering column, torque converter and transmission.

Improving Parts Mileage

It was observed that there was such a large spread between the average and the maximum that surely the average life could be improved. The problem was to convince the personnel of the necessity of improving the life of these units. A mean mileage figure was determined between the average and the maximum values of mileages.

Let us pick the generator as an example. Average miles 49,000—Maximum mileage 207,000—Mean would be 128,000 miles.

The mean divided by the average came out with a constant of 2.6 which meant that we were changing the generators 2.6 times more than we would if the average mileage could be brought up to the mean value.

In the year under check there were 581 generators removed. The garages expended 2.5 man-hours in each change, or a total of 1453 man-hours.

The 581 generators when divided by the constant 2.6 gave a value of 223, or the number of units which would have been removed if the average miles were brought up to the mean.

Taking the new value of 223 units times 2.5 hours, to do each change, gave a total of 558 man-hours, or the garage department would save 895 man-hours.

From the shop end, we will take the same group of generators as an example of how it can save.

As mentioned previously there were 581 units removed for overhaul. The shop spends an average of 2.75 man-hours per unit. The 581 units represent 2760 shop man-hours.

Now, since 223 units would have been the number removed, if the average miles had been raised to the mean between the average and maximum, a saving of 1501 shop man-hours would result.

Now, there has been established the technique used to determine the man-hours saved in the garages and shops for the one item—generator.

From the auditor's report the dollar value of the material was obtained. The dollar savings in labor was obtained by multiplying the man-hours saved by the average hourly rate of pay.

Possible Savings

Now, let us apply these procedures to each of the other 12 items and look at the recapitulation of savings for the garages and shops:

1. 69,000 man-hours saved
2. $133,000 labor saved (overhead not included)
3. $176,000 materials saved

$309,000 saved

This $309,000 savings represents the monies we would have had in our coffers if we would have raised the mileage on these 13 units from the average value to the mean value

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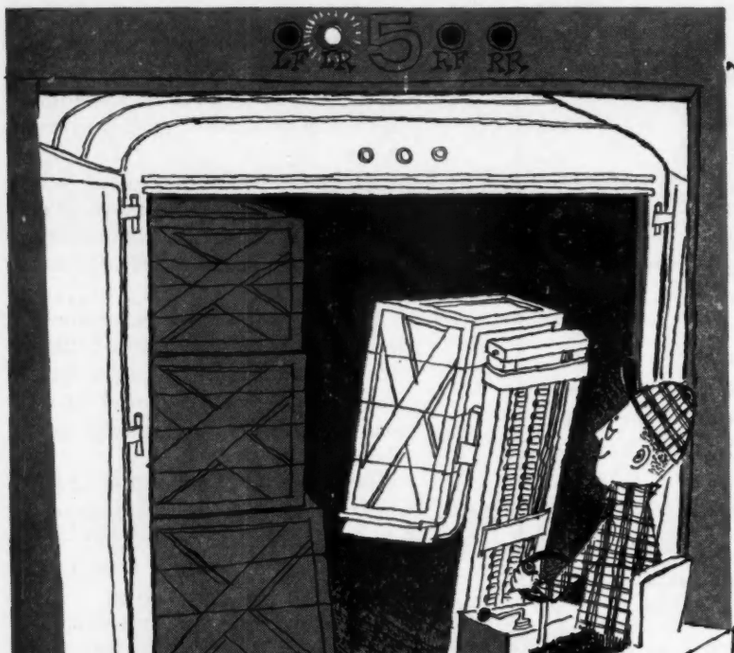


Electronics

How to reduce "nose light" loading

By E. S. Safford, President, Control Cells Corp., Boulder, Colo.

INEFFICIENT LOADING is now costing the trucking industry a sizeable fortune.

Even with the "high cube" trailers many units are rolling away from the dock without payload which they could legally carry.

The reason: Inefficient load-control methods.

True, most of the larger companies now have axle weighing scales. But these are seldom used until after the trailer is fully loaded and moved away from the dock. Then when an overloaded axle is discovered, the trailer has to be returned to the dock for reloading. This takes time, costs money. And in at least one fleet the dock workers have developed the habit of purposely loading the nose of the trailer light, so that when overloading is spotted all they have to do is unload from the rear until the overload is remedied. While this may cut reloading time, it means many of the fleet's units are rolling with less than maximum loads.

Maximum Loads

How much better it would be if truck operators were able to control their loads during the loading process. If they could know immediately when an axle was loaded to capacity and when the maximum gross load limit was reached.

Several years ago, this might have been but a vague dream. But today, thanks to recent developments in the electronics field, instrumentation is available which will tell you what is going into the trailer while it is being loaded. With such equipment, there is no excuse for loading units to less than their maximum legal capacity.

Some fleets may believe that their present load control methods are adequate. A close study will soon show that there's still plenty of room for improvement. A study was recently made of one such fleet which operates several hundred tractors and trailers. These are the facts:

Using standard 35-ft tandem trailers and rear loading, this company checks the weight of every combination on terminal scales before the rig goes on the road. If an axle or tandem is overloaded, the unit is returned to the dock for load adjustment. If an axle is permitted to leave overloaded, a severe penalty is assessed against the responsible supervisor.

During the study, records showed that of approximately 50 trailers leaving the dock each night, an average of one trailer per night was returned for load rebuilding. This then, averaged two per cent of their trailers. On the basis of 500 trailers operating over their entire system, it meant 10 trailers a night were reloaded. On the basis of a 22-day workmonth, a total of 2640 trailers had to be reloaded in a year.

"Nose Light" Loading

In this fleet, the dock men were using the trick of light nose-loading, mentioned earlier. Checking the records, it was found that this particular company had an average drive-axle loading of only 12,000 lb with tandems of the trailer close to the legal limit.

Guide Cargo Loading

trailers, get up to 6000 lb more net revenue per load

Look at these figures:

The trailers could legally carry 18,000 lb on the single drive-axle, but they were going out on the average at 12,000 lb. They were leaving 6000 lb of potential profit behind on every trip. At an average hundred-weight revenue of 75¢, this was a revenue loss of $45 per trailer per night. With 500 trailers operating 22 days per month, this amounts to a statistical revenue loss of $495,000 per month or $5,940,000 per year.

Increased Net Revenue

You will immediately say that full legal loads can't be realized on every trip. This is absolutely true. But suppose this particular company increased their drive-axle loadings by only 1200 lb instead of 6000 lb. They would still increase their revenue by $1,188,000 in one year.

And the important fact is that most of this increased revenue would be profit. It wouldn't take any more tractors, any more trailers, any more licenses, any more drivers, any more insurance, or any more terminals to get this increased revenue. All it would require is proper instrumentation to control nose loading while the trailer is being loaded. Instrumentation which is available today.

Need Fewer Units

The story isn't over yet. This same company found that due to underloading at the nose of the trailers it was necessary to arrange for additional units to move all the freight on schedule. For example: after two trailers had been loaded for destination "A," it was found that 10,000 lb of freight was left on the dock that had to go to "A." A third trailer was called from the pool, loaded, and sent out. Properly loaded, the first two trailers could have carried their load and the 10,000 lb. A check of the company's figures showed that, on this basis, with proper load control approximately 10 per cent of their equipment could be retired and still handle the same tonnage.

What would this mean in terms of cost savings?

Ten per cent of the 500-unit fleet is 50 units. An average tractor-trailer combination represents an investment of $25,000. Fifty units would require an investment of $1,250,000 or would represent a saving of that much if they were eliminated. Additional savings would also be realized: fifty drivers at $5,000 per year is $250,000 a year reduction in driver costs; license fees for 50 units; insurance; operation and maintenance costs—all could be eliminated by proper load control.

Let's recall the basic principle of trucking economics. Profits depend on moving the most payload at the least cost. If trucking companies will use proper instrumentation to achieve complete load control, the profit potentials become little short of fabulous.

Going back to the company mentioned earlier, if it costs $1,000 per trailer to equip its units with built-in electronic weighing equipment (it doesn't cost that much), an investment in instrumentation of $500,000 would be required for the fleet. This may seem like a lot of money, but the figures show that if the drive-axle loads are increased by only 1200 lb, earnings would jump by $1,188,000 in the first year. In other words, such instrumentation can be paid for in less than six months.

Over-Equipping

Some trucking companies will rationalize their present operation as sufficient because they are using tandem drive-axle tractors. With this arrangement, it is quite difficult to overload the nose of the trailer. This solution, however, is not the efficient, profitable one. By "over equipping," it is possible to reduce the worry of overloading. But it is neither efficient nor profitable to pay the cost of the additional equipment, the additional maintenance, and the additional operating costs of tandem equipment when, in many cases, a single axle tractor will handle the job.

With adequate load control instrumentation the most efficient power unit may be used and maximum equipment utility realized.

(TURN TO PAGE 114, PLEASE)

Grandview Dairy Calls on the Experts

. . . to assist in carrying out a streamlined PM program designed to get the most miles per maintenance dollar with least amount of shop time

GRANDVIEW Dairy in Brooklyn is a small fleet with some big ideas for getting maintenance done efficiently. The streamlined service program worked out by Mr. J. Finn, manager of transportation, and Mr. Frank Lepple, fleet superintendent, has enabled the company to keep 60 trucks running smoothly with the least amount of overhead.

This dairy is involved with wholesale milk delivery. That is the business. Vehicle maintenance is of secondary importance, being set up only to keep the trucks hauling milk. Even so, maintenance, according to Mr. Finn, deserves the attention of experts. And the manner in which Grandview goes about getting expert advice and assistance with the least amount of shop time and space is rather interesting.

Due to low work volume it is not possible for a dairy of this size to justify the hiring of experts and technicians for each phase of maintenance work. The ideal set-up would be to have an automotive engineer in charge of each job, but that is impossible. So Grandview takes the work to the engineer, the technician or the expert. Here's how they have been able to maintain this equipment with only three mechanics and one helper of their own, in a small shop on a 5-day work week (6-day operation).

Seven Steps

Step No. 1. Utilizing engineers from industry for advice and counsel. Under this program one of the first steps was the employment of an oil analysis service. Intermittent service with frequent starting and stopping caused plenty of headaches with engine sludging and crankcase deposits even though all precautions were taken to control temperatures, combustion efficiency, filtration, etc. Then Grandview called in PMS, an organization supplying periodic analysis of used oil samples. The samples were used as the guide in determining which engines required what type of servicing and when.

The program saved a great deal of service, but more than that it saved a lot of engine wear and has practically eliminated sludging troubles by providing an intelligent guide to service. The chart below shows the combined analysis results for initial round of samples and the engine operating experiences as compared with the latest experience data.

Oil Analysis Results

	1st Analysis	4 Years Later
Engines Sampled	54	56
Quantitative Evaluations: (%)		
Avg. Fuel Dilution	5.7	4.6
Water Leaks	5.4	–
Abnormal Gums	37.5	10.4
Abnormal Fuel Soot	64.2	18.5
Instances Granular Carbon	21.0	1.6
Instances Abrasives (sand, dirt, etc.)	14.5	4.1
Metal (engine wear) (avg. wt/sample)	53.7 (4.7 mg)	22.2 (1.9 mg)
Avg. Viscosity @ 125° F	254 sec.	244 sec.
Avg. COC Flash °F	196	208
Oil Drains Requested	87.5%	40.0%
Oil Filters Requested	91.5%	46.5%
Avg. mi/gal gas	4.3	5.2
Avg. mi/qt. (make-up oil)	126	217
Avg. mi/veh/month	575	610

In addition other pertinent data was developed regarding the in-

Far left. Grandview says tests show dry sump air cleaners provide more oxygen for more complete and cleaner combustion in the engine

Left. Economic "appearance maintenance" results from agreement with commercial car wash for off-peak washing, joint arrangement with another fleet shop to handle painting work

fluences of gasoline volatility and composition upon combustion efficiency hence the degree of "waste" products formed in engines under circumstances heretofore not within control at the shop.

Increased Engine Efficiency

It was established that the principle cause for sludging and the ultimate affects upon operating efficiency were the result of incomplete fuel combustion, by-products of which enter the internal engine from the combustion chamber. As the occurrence rate of these combustion by-products were reduced engine efficiency improved accordingly.

In following up another project with factory engineers, Purolator air cleaners (dry sump) were installed. After extensive tests it was determined that this type cleaner provided increased oxygen for more complete burning of fuel in time allowed for better combustion. The dry sump air cleaner reduced the hazards of restriction of air by inadequate and/or improper servicing and proved well worth their cost in cleaning up combustion.

Presently, the company is concerned with our requirements in crankcase ventilation. While this requirement will be influenced by operating circumstances, it is intended to increase the latitude to cope with fluctuations in our operation which demands greater ventilation.

Vehicle Washing

Step No. 2. Farming out vehicle washing. The company recognizes that good looking equipment is a prime consideration for a dairy fleet, yet did not feel that they had volume enough or even space enough to set up a washing area. Accordingly, they went to a local commercial car wash, made an agreement to send vehicles over during the early part of the week, when the station was not normally busy. They helped build platforms at the station so that trucks could be washed conveniently. Now 6 to 11 trucks are washed per day and Grandview is relieved of all washing headaches. Payment is made on a per truck basis, and figures out to be less costly than would be setting up facilities on their own premises.

Step No. 3. Farming out painting. By the same token Grandview did not feel that they had sufficient volume to install a paint booth and buy spraying equipment, not to mention the troubles of hiring painters. So they worked out a deal with another fleet shop. The agreement proved advantageous to both parties for the other company now can meet their own requirements as well as Grandview's with about the same overhead.

Step No. 4. Setting up tire contracts. Tire work such as fixing flats and vulcanizing was turned over to a local dealer who was able to offer a convenient service that Grandview could not match even with their own facilities. The recapping firm takes over all responsibility of changing, matching, retreading, and replacing tires on a contract basis, leaving Grandview only to change a wheel in the shop in the event of a puncture.

Electrical and Brake Work

Step No. 5. Jobbing out electrical and brake work. Because of the trouble of hiring men competent to do all kinds of electrical diagnosis, Grandview found that it was more practical to leave the responsibility to experts. The same was true of brake replacement. Now, when the shop detects trouble in electrical or ignition systems, the unit is pulled off and is taken over to a nearby jobber who makes all necessary repairs and adjustments. The shop men are thus only responsible for detecting wear or impending troubles before final breakdown.

(TURN TO PAGE 138, PLEASE)

Make a simple drawing of your home-made tools. Take a picture of the shop equipment you have built. Send us a brief description. We will pay $10 and $25 to those who submit good ideas for improving maintenance

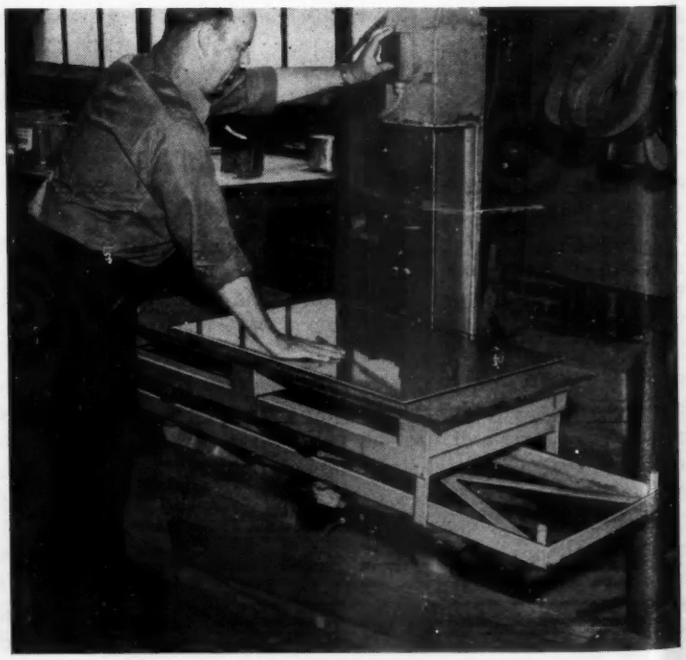
Window Glass Edger

By Allan Coolbaugh
Wilkes-Barre Transit Co.

Here is a handy device we rigged up to polish the edges of window glass after it has been cut to size. There is no reason why this machine couldn't be used for other buffing operations in wood or metal as well.

Our modification consists primarily of this traveling table or carriage set up on the pedestal of the buffing machine. It is a rectangular track made of angle iron. The four rollers are small v-type pulley wheels set on a shaft to fit the track. The upper carriage rides on smaller pulleys attached to the same axle shafts. Guides and stops provide for proper travel through a distance of three feet.

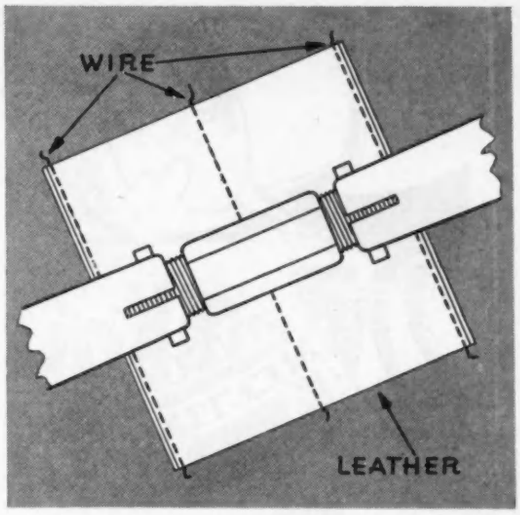
The glass is laid on the padded bed and is moved along horizontally for a smooth, even buffing operation without danger of breakage.



Sleeve Protects Radius Arms

By Raymond J. Dickerson, Dohrn Transfer Co., Galesburg, Ill.

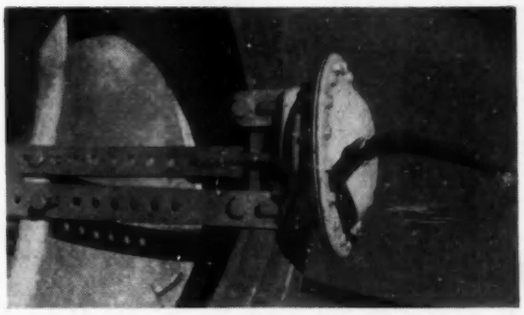
We have found that after a trailer has been on the road a while, the radius arms become full of dust, dirt and rust and are impossible to adjust. Most of the time it is necessary to either heat the arm or drill holes in each end and put in a penetrant compound. Often it is necessary to cut out the old arm and install a new one. This takes time, parts and money. We have found that if the radius arm—after the axles are lined-up—is thoroughly greased and covered with a leather (or canvas or rubber) sleeve, the dirt and rust are kept out and the arms are easy to adjust.



Brake Diaphragm Spreads Tires

By Tony L. Moniz, O.K. Trucking Co., Oakland, Cal.

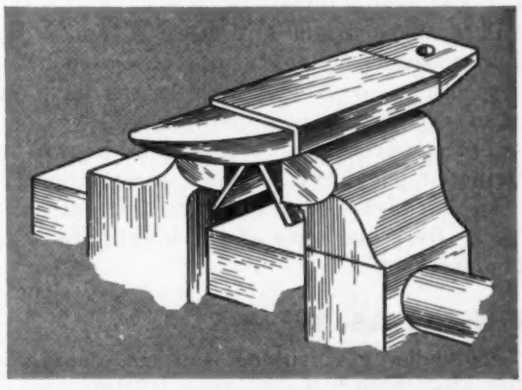
Here is a picture of a tire spreader that I built for use around the shop. It is easily portable and very handy to use when a heavy-duty tire must be spread open for inspection or repair. It is made from an old air brake diaphragam and some scrap iron. To operate it, first connect to an air line and the center will push out. Then by inserting a cap screw in the lower strap, the tire will stay spread.



Anvil Stops Vise Damage

By Charles H. Willey, Route 7, Penacook, N. H.

Many good vises have been badly damaged from hammering work on either the closed jaws or on the flat back of the rear jaw. Make yourself a good anvil as shown in the sketch to prevent this. This anvil can be quickly and securely attached in the bench vise and will take care of any needed hammer work. The welded angle iron base makes for rigid, secure locking, prevents tipping of anvil when using the horns at the end of the anvil.



Dolly Speeds Front Wheel Service

By E. B. Ray, Standard Oil Co. of Texas garage, El Paso, Texas

This shop-made dolly takes the strain and lifting out of packing truck front wheels. Jack up the wheel enough to put the roller end of the dolly under it. Take off the wheel nut and lift the wheel enough to free wheel bearing. Holding the top of wheel with one hand, lift the dolly by the handle and roll the wheel off. I made it from 6 ft of 1/2-in. pipe, bending it in a U-shape and welding it to an axle made of a 13 1/2-in. length of 5/8-in. bolt. The wheels are two used Ford generator bearings held on with two 5/8-in. nuts. Bend the curved end of the pipe slightly upward to provide space to get your hand under it.

More Miles from

Here are some practical tips on lengthening PM

Cutting Maintenance Costs

THE NATIONAL SAE Annual Meeting in Detroit last month witnessed some interesting and educational papers presented by both the Truck and Bus and Transportation Activities. T and M sponsored a symposium on lengthening intervals between PM inspections—a subject high on the list of interests of every truck or bus operator.

Three representatives from well known fleets participated, providing as many suggestions for cutting costs through better control of maintenance practices. Here are some of the highlights of this two-hour session.

Extending Lube Periods

Molybdenum disulfide greases, especially when combined with a multi-purpose lithium base, got an unexpected hand. Nearly all of the fleets represented have been experimenting with these products. Ward Bennett of Baltimore Transfer reported that he had doubled his lubrication periods for over-the-road equipment to approximately 6000 miles.

Another operator, Bert Ogden of Consolidated Freightways, has gone to 5000 miles and a measured wear analysis shows less wear on king pins and other vital parts than when much shorter periods were being observed.

Longer Component Life

There was considerable discussion, again led by Bert Ogden, on the subject of inspection and instrumentation versus fixed mileage replacement practice. As examples, Ogden cited the fact that he is now getting an average of 99,000 miles on transmissions compared to 68,000 on the old fixed replacement basis—an increase of 45 per cent. On one type of differential he is now getting 153,000 compared to 111,000 miles—an increase of 38 per cent; and on another type of differential he is now getting 113,000 compared to 88,000 under the older method—an increase of 28 per cent.

Meanwhile, engine road failures decreased 45 per cent in 1954 over 1952, and at the same time, the period between engine overhauls was increased by 33 per cent.

Upping Gas and Oil Mileage

Speaking for a local delivery operation, Arnold Dach of Chestnut Farms Chevy Chase Dairy cited an increase of from 5 to 15 per cent in gas mileage and approximately 16 per cent in oil mileage by the careful selection of a Series 2 lubricating oil. While the accuracy of his gas mileage figures was questioned, due to the lack of specific control, he pointed out that the lower gas mileages had been obtained in colder weather in each case, indicating that he was on the right track.

Several of the local operators had also experimented with multi-viscosity oils with good success. Hertz Corp. found it particularly useful in vehicles stored in the open during extremely cold weather.

Using Accurate Records

J. H. Dolan of Burlington Truck Lines kicked off a discussion on the importance of accurate records and the necessity of using these records hand in glove with modern inspection procedures. Mr. Dolan also pointed out that: "Lowest maintenance costs are not necessarily the indication of the best maintenance program. A vehicle deadlined for a long period of time does not acquire much maintenance cost. Neither does it bring in any revenue."

Your Maintenance Dollar

service intervals, plus a look at maintenance education, fans and horsepower

A later discussion, which included both cost and record keeping, highlighted the point that sometimes increased cost in the accounting department offset savings in the maintenance department and should be guarded carefully.

Supervisor Cooperation

A final aspect of the discussion centered around the fact that no maintenance program, however carefully it may be planned, is better than the personnel that administer it. Good supervision is, of course, imperative, and it was suggested that one of the best ways of maintaining shop morale was to keep key personnel informed.

Mr. Ogden made the statement that no major changes in shop procedure are ever ordered in his fleet until all supervisors have a chance to comment.

Education for Engineering

In an evening session sponsored by several activities, four speakers tackled the subject of education for engineers, attempting to show what the engineering colleges are doing to produce automotive engineers capable in the fields of development, design, production, operation and maintenance of vehicles. This was indeed a broad subject and opened up considerable discussion from the floor.

It was generally agreed that the industry is not getting the properly trained graduate. It was agreed that improved incentives, vocational guidance and assistance from industry will be required in even more proportions in the future if our technological demands are to be met with capable personnel.

Few Answers Provided

While there were few answers provided as to how improvements can be attained, the symposium was instrumental in kicking off some constructive thinking that may be felt in industry later.

Those taking part in the symposium were Preble from Tide Water, Easton from Rutgers University, Simkins from CCJ, Horine from Mack and Stanley from the Diesel Engine Manufacturers Assn. Dean Freund from Detroit University, Howard Willett from Willett Co. and Karl Richards from AMA offered prepared discussions on the subject.

Fans and Horsepower

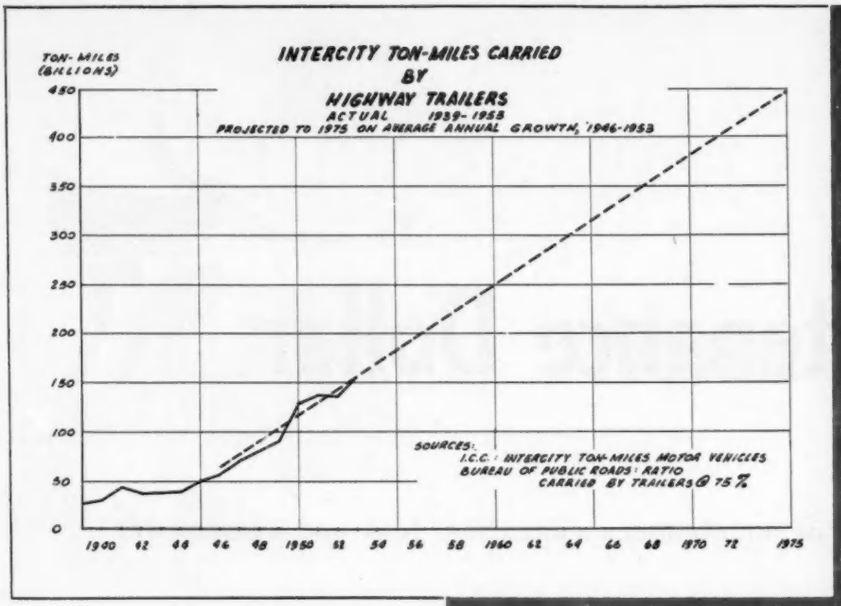
The Truck and Bus Activity scheduled a formal paper on the Chevrolet automatic transmission (see page 90) and set up a panel on fan horsepower losses and noise and their reduction. Here are some brief reports from the panelists and from the discussion from the floor.

Cooling fans of automobile engines are in line for improvement. Engineers say fans must be made quieter, more efficient and automatically adjustable to temperature needs regardless of engine or vehicle speeds.

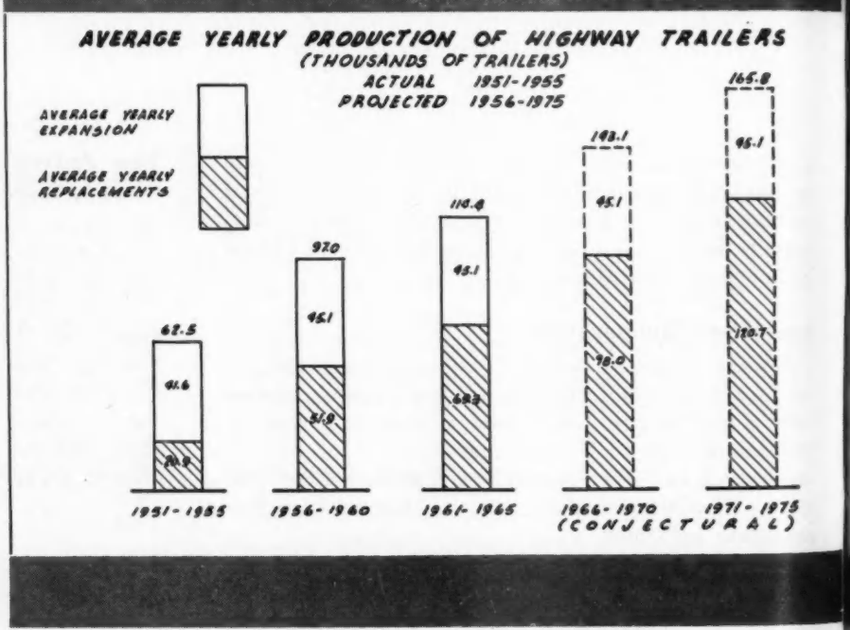
Variable Pitch Fans

Fans are absorbing too much horsepower, said D. F. Lemaux, GMC Truck and Coach Division, General Motors Corp. He proposed the use of belt-driven variable-pitch fans reporting that this design assures faster engine warm-up. satisfactorily stabil-

(TURN TO PAGE 140, PLEASE)



To handle the steady increase in trailer freight predicted for the next 20 years in the chart at left, trailer production should follow the trend shown below says Prof. Barloon



IN JANUARY 1953, Professor Marvin Barloon of Western Reserve University presented his first 20-year projection of the truck trailer industry to members of the Truck Trailer Manufacturers Assn. (March '53, page 64).

At that time he predicted average annual production of truck trailers for the years 1952 through 1955 at 65,500 units. The actual figure, from which a large volume of military units built for the Korean war have been subtracted, turned out to be 62,000. This represents a forecast error on the high side of only 5.4 per cent—an excellent record for any long range prediction. Had the military units been included the forecast would have been nearly 10 per cent low.

1975 Forecast

In spite of the results, the Professor is not satisfied to rest on the record, has revised his figures for the years still ahead to a somewhat lower figure. At the same time he has extended his forecast for an additional five year period from 1970 to 1975.

As might be expected from a good researcher, the full report* points to the fact that no long-range prediction can be regarded with certainty. It particularly warns of two specific factors which could "upset the apple cart"—piggy-back and proposed revisions in the Interstate Commerce Act.

Future Predictions

So much by way of introduction. From the report itself come these predictions:

• INTERCITY FREIGHT TONNAGE carried in highway trailers is projected as rising from 181.4 billion ton-miles in 1955 to 246.9 billion in 1960, 378.2 billion in 1970 and 443.8 billion in 1975 (see graph at top of page 82). Note that this is *trailer* freight only representing an estimated 75 per cent of total highway freight. The balance is expected to move by single truck units.

• Total number of TRAILERS IN SERVICE is projected at 848,500 in 1960; 1,299,500 in 1970 and 1,525,000 in 1975. This represents an annual *net* increase of approximately 45,000 units a year.

• PRODUCTION OF TRAILERS

*Available without charge from Truck Trailer Manufacturers Assn., 710 Albee Building, Washington 5, D. C.

. .The Long Range Future

Trailer builders get second look at what's ahead for next 20 years. The steady improvement should hold for all phases of the trucking industry

Based on a study

By Prof. Marvin J. Barloon

developed for Aluminum Co. of America and presented at the 15th annual convention of the Truck-Trailer Manufacturers Assn. In it, he comments on his earlier forecast made to TTMA members in January 1953, extends his predictions to 1975. By which time, he says intercity ton-miles carried by trailers should reach 443.8 billion, representing 75 per cent of total intercity truck tonnage. To handle this load, he adds, annual trailer production should be 165,800 to allow for fleet expansion plus replacement.

is projected at an average of 97,000 per year from 1956 through 1960, increasing to 114,000 per year from 1961 to 1965. From 1966 through 1970 the annual average figure is 143,100 and from 1971 through 1975, 165,800 units. (See bar chart, above, left.)

• TRAILER - ON - FLATCAR movement will probably have *little effect* on trailer production. Trailers carried for truck lines will merely be a substitute for highway hauls and there is little indication that railroads will promote "captive piggy back" (trailers owned by railroads) *merely* as a substitute for box car movement.

• TRANSPORT POLICY REVISIONS, as contemplated in the Cabinet Committee report could have a marked effect on highway transportation and cannot be predicted at this time.

• REPLACEMENT DUE TO OBSOLESENCE or revised state regulations is of course effected by new trailer designs but the impact is often of relative short duration. (i.e. development of the high cube van, and increases in Pennsylvania weight limits spurred the market temporarily but not permanently.)

• AGE OF TRAILERS at time of retirement declined from an average of 11.68 years in 1951 to a little over 10 years in 1954. Average age in the future is projected as being in the neighborhood of 9 years.

Professor Barloon warns in the report that he has no crystal ball that gives an absolute picture of future events, says, "The forecast, therefore, should always be understood merely as the way the future looks from where we are now." Adds that the predictions are based on the assumption that there will be no major depression and no major war.

Service vs. Replacement

While Professor Barloon sees a steady increase in trailers in service of 45,000 per year, his trailer production prediction is on an increasing rate (about 97,000 per year between 1956 through 1960 to about 165,800 per year from 1971 through 1975). However, the increasing rate of production will be off-set to some extent by a drop in the average trailer life. New trailer developments and changes in state laws will also be somewhat of a factor barring a higher increase in trailers in use as production increases.

Since 1950, according to the report, ton-miles of cargo carried annually per trailer has not altered substantially. While cubic capacity of trailers has increased with the various high cube models, the increase in volume has been off-set by an increase in lighter density freight. Professor Barloon notes that the full impact of the high cube trailer has not yet been measured, adds that this factor in connection with a general trend toward liberalization of state size and weight laws and increased length of haul could result in increased annual ton-miles per trailer.

Trailer vs. Straight Truck

A major reason for the slight error in forecasting average annual trailer production mentioned in the second paragraph of this story was the assumption in Barloon's earlier report that trailers would haul an increasing percentage of total truck freight. His current report notes that the division of freight between trailers and straight trucks seems to have stabilized itself with a 75-25 per cent division.

For this reason, plus the possibility of an increase in annual ton-miles per trailer as discussed above, trailer production predic-

(TURN TO PAGE 132, PLEASE)

New PRODUCTS

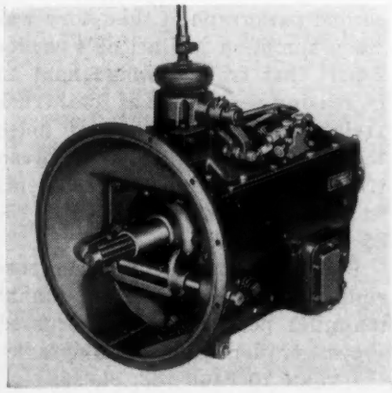
The latest developments in parts, accessories, tools and equipment for the fleet field, described in brief for your convenience

P1. Paint Preparer

Curran Corp., Lawrence, Mass., announces a new, synergistic volatile solvent that cuts, dissolves, and rips off traces of tar, silicone, wax and loose oxide film from old paint surfaces in preparation for refinishing by spray painting. It is intended to slightly soften and bite the old paint.

P2. Transmission Assist

Spicer Corp., division of the Dana Corp., Toledo, Ohio, has announced an air assist control for its line of 6000 Series synchronized transmissions. One of its important features is that it can be readily installed in place of the standard tower control, thus effecting complete interchangeability. With the air assist control, the operator requires an effort of only 5 lb on the gear shift lever to effect a shift. The air assist, in turn, builds up to 450 lb of force to actuate the shift fork. Thus the device reduces manual effort materially, reduces fatigue, and provides for faster and more precise gear shifting. Photograph shows the Series 6000 transmission with the air assist installation mounted on the cover.

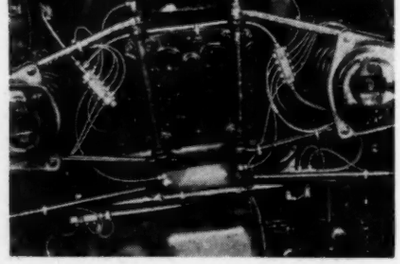


P3. Fuel Filter

Kem Mfg. Co., Fairlawn, N. J., announces its newly designed microbronze fuel filter. The manufacturer states this new full flow filter will show no measurable pressure drop at high speeds, will not crumble or shed.

P4. Vehicle Lube System

Alemite Division, Stewart-Warner Corp., Chicago, announces a centralized lubrication system for cars, trucks, buses, tractors or any vehicle or equipment having an internal combustion engine, which automatically delivers a controlled, measured amount of lubricant to as many as 30 lubrication points or bearings each time the engine is started. System consists of a vacuum operated pump from which tubing carries lubricant to a positive displacement measuring valve located at every bearing. (View of underside of vehicle shows distribution.) A single line terminating system, it is energized whenever the ignition of the car is turned on and the engine is started. An indicating light on the instrument panel glows while the system cycles; if it fails to light, it indicates to the driver that there is a fault in the system—a broken line or lack of lubricant in the reservoir.

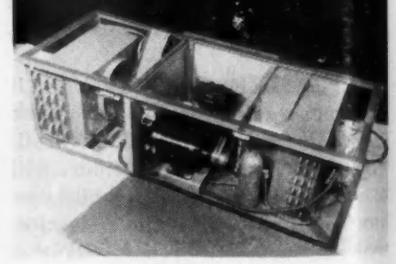


P5. Tappet Tool

Zim Mfg. Co., Chicago, announces a heavy-duty drop forged tool for all overhead rocket arm tappet adjusting operations. It's designed to take any four-way, ½ in. square drive socket. To use, select the proper size socket, place over the square drive, drop over the lock nut. Handle knob is pushed down to engage the screw driver in the screw slot and it's all ready to proceed with the adjusting and locking operation.

P6. Reefer System

Frank-Dewey Co., Detroit, announces a new "Rovan" all-electric refrigeration unit for trucks of from 300-600 cu ft capacity. At normal driving speeds, the new unit has a capacity of about 10,000 Btu, at idle the capacity is from 6000 to 7000 Btu. The whole unit is insulated and completely self-contained. An alternator attached to the truck's engine gives refrigeration on the job, overnight the new unit plugs into any 110-115-volt AC outlet. Major electrical components of the system are engineered by the General Electric Co. For trucks with 300-cu ft insulated bodies, Model No. CE-60 weighs 355 lb. The Model No. CE-90, 30 lb heavier, is designed for 600-cu ft trucks.



P7. Gear Sets

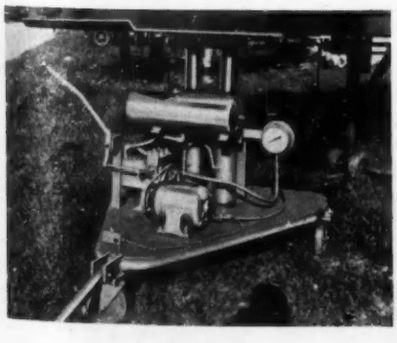
Cloyes Gear Works, Cleveland, Ohio, announces availability of matched gear sets said to be engineered and matched for heavy duty truck applications. According to the company, the timing requirements for maximum power output on the higher compression truck motors are now more exacting, and many require zero backlash. This means that gears must mesh at controlled clearances, the company explains, and to achieve this the Cloyes gears are matched at the factory and supplied as a completely engineered unit. The new matched gear sets help eliminate problems of camshaft lag through loose gear mesh.

P8. Fountain Brush

K. C. Fountain Brush Co., Kansas City, Mo., announces a new fountain brush for vehicle exterior cleaning. Brush head measures 2¾ x 16½ in. —only a few passes are required to cover a large surface. Bristles, 2¾ in. long, are supplied in 100 per cent Dupont "Tynex" nylon or in 50 per cent Tynex and 50 per cent horsehair if desired. Brush handle is lightweight corrosion-resistant aluminum pipe, 5 ft long, with ½-in. female thread. Brush element is replaceable or refillable. Head is surrounded by a rubber bumper.

P9. Trailer Scale

Cemco Industries, Galion, Ohio, announces a new device for weighing trailers during loading called "Trailer-Weigh." It is operated by placing the "U" channel member, which joins the tops of the two cylinders, under the front end of the trailer body (usually parked against a loading dock) and then applying hydraulic pressure so as to rest the full weight of the trailer's front end on the piston assembly. Lower end of this piston-cylinder assembly rests on the ground. Gage valve is opened to get a reading in pounds pressure—translated into pounds lifted.



P10. Tandem Suspension

Truck Equipment Co., Buffalo, N. Y., announces an improved version of "TandemTrac," the universal tandem suspension introduced by the company early in 1954. Called the "Series D," the new TandemTrac incorporates a number of improvements while retaining its original features. In addition to simpler installation and the elimination of clamp-type radius rod anchors, the Series D offers greatly expanded automatic weight distribution. In the Series D both pushed and trailing axle models (PD & DT) still offer the 60-40, 50-50 weight distribution. In addition, the new TandemTrac offers optional automatic weight distribution of 62-38 unladen and 54-46 laden. These options can be selected at the factory or in the users' shop without extra parts.

P11. Alternators

Leece-Neville Co., Cleveland, Ohio, announces two new, heavy duty alternators designed for passenger cars, light and medium trucks, school busses, or other equipment which is driven regularly at slow speeds with frequent stopping and starting, or which have heavy electrical loads. Model No. 5410-G3, designed for 6-volt electrical systems, has a 95 amp capacity. Model No. 5412-G6, for use on vehicles having 12-volt systems, has a 50 amp capacity and can be modified to give up to 125 amp. A transformer may be attached to the alternator to give up to 800 watts of 110-volt portable power.

P12. Sliding Rear Window

Barber's Glass and Mfg. Co., Oklahoma City, Okla., has available sliding rear windows for truck cabs. According to the announcement, models can be had to fit any truck. The window comes complete and ready for installation, including detailed instructions. Barber says it takes about 20 min. to install. The sliding portion of the window is on the driver's side.

P13. Nylon Tarpaulins

Domestic Film Products Corp., Millersburg, Ohio, is making heavy-duty, abrasion resistant truck tarpaulins from "Geon" vinyl plastic coated nylon. The light weight tarp is said not to absorb water and remains flexible from below zero temperatures up to 180°F. The covers are translucent allowing daylight loading without artificial light. The tarps also resist the effects of grease, oil and mildew.

P14. Piston Ring

Hastings Mfg. Co., Hastings, Mich., has introduced its new beveled chrome-vent piston rings. Bevel feature enables these replacement rings to seat 3 to 4 times faster than conventional chrome rings, says Hastings. The new beveled design is used on both top and bottom rails of the oil ring. Being beveled, the rails make "fineline" contact with the cylinder wall, thereby reducing the wear-in area for faster break-in. Oil control starts immediately. And because the beveled design permits the use of a lighter inner-spring, the result is a soft-pressure oil ring.

P15. Injector Tester

Kent-Moore Organization, Inc., Detroit, announces a tester to check all GM Detroit diesel injectors with no major change in setup. All six tests —rack freeness, plunger freeness,

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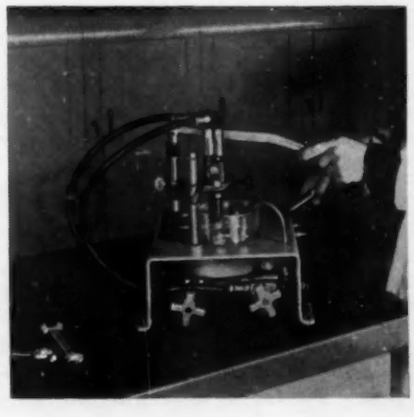


New Product Descriptions

Continued from Page 85

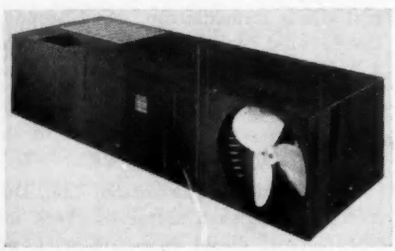
spray pattern, valve opening pressure, holding pressure and high pressure—specified for all Series 51, 71 and 110 engine injectors can be performed on the new Model No. J 7000 injector tester. No special conversion units or individual holding fixtures are necessary. Adaptability to all of the injectors for these three engines is by changing the threaded end connectors.

P16. Sealed-Beam Lamps

General Electric Co., Nela Park, Cleveland, Ohio, announces two new "All-Weather" headlamps, which can be accurately aimed more easily on new aiming devices now on the market. The new headlamps feature the G-E "Aim-right Gizmoes"—glass pods molded in the lens to enable quick and accurate aiming. "Aim-right Gizmoes" control the position of the lens in manufacture so that they have a positive relation to the direction of the light beam.

P17. Air Conditioner

Ellis & Watts Products, Inc., Cincinnati, Ohio, announces development of a new commercial air conditioning unit designed especially for use in



display vans, bookmobiles and mobile stores. Units are self-contained, require electricity to operate. Cooling, humidifying, dehumidifying, filtering and heating are incorporated in a single package. Built to fit any location inside or outside of van with easy access for service and maintenance. Mobile air conditioners of any capacity are available, 1 to 20 tons.

P18. Truck Cover

Webb Mfg. Co., Philadelphia, Pa., has developed a new truck cover coated with Goodrich Geon. It features electrically welded seams, said to be both leak proof and tear resistant. The fabric is translucent, permitting visibility inside the trailer. Laboratory tests of the material in temperatures ranging from 30 deg below 0 to 180 deg above show it remains flexible, watertight and acid, oil, abrasive and tear resistant. Repair kits containing a quart of a special adhesive and several pieces of new material permit easy repair.

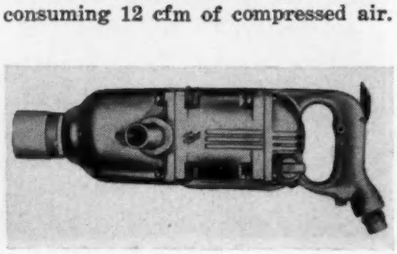
P19. Vehicle Washer

Ross & White Co., Chicago, announces a modification of its "Wilson" movable washer, the "Wilson" convertible washer specifically developed

to wash the hard-to-clean trailers employing closely spaced vertical ribs. It can wash conventional type trailers with its 9 ft brush in the upright position. However, it has the advantage of a swivel joint on the brush boom, permitting the brush to be easily placed in the horizontal position. In this position the brush can be moved down the side of the trailer by the elevating forks of the lift truck. The washer is a completely self-contained unit other than requiring a 6000-lb capacity fork lift truck for mobility. It carries its own water, and the rotating brush derives its power from a gasoline engine via a hydraulic pressure system.

P20. Air Impact Wrench

Thor Power Tool Co., Aurora, Ill., announces a new air impact wrench, the Model No. A7W, with a capacity of 1¼-in. The newly developed wrench delivers 720 blows per minute consuming 12 cfm of compressed air.



P21. Air Suspension Tools

Kent-Moore Organization, Inc., Detroit, has just released a tool set for the disassembly, reassembly, and adjustment of the three height control valves used in the air suspension models of GMC coaches. The Model No. J 6049 air suspension height control valve tool set contains the tools necessary for the following operations: Removing and installing the control valve locknut, the control valve assembly; removing the shaft and handle from the dampner body assembly; calibrating and setting the actuating arm position; and locking the control valve assembly.

P22. Piston Ring

Ramsey Corp., St. Louis, Mo., announces its new "Groove Guard" chrome plated ring, which, according to announcement, provides repair of worn piston top grooves and also acts as an auxiliary compression ring. According to the announcement, the ring is not just a spacer, but improves the performance of the entire ring assembly by adding two extra contacts to the cylinder wall.

P23. Tarpaulin Material

Marine Canvas Supply Corp., Brooklyn, N. Y., announces a vinyl-impregnated cotton canvas for truck and trailer covers. "Jaton" canvas, says the fabricator, has been subjected to the most rigorous tests to assure its being life-time waterproof, weatherproof, fireproof, abrasion-resistant, and flexible.

P24. Stop/Tail Lights

Auto Lamp Mfg. Co., Chicago, are now making heavy-duty stop and tail lights in a streamlined, new rimless style for trucks, tractors, trailers and buses. The new, state-approved styles

(TURN TO PAGE 122, PLEASE)

Read What They Say:

SUCCESSFUL FLEET OPERATORS ENDORSE PHILLIPS 66 HEAVY DUTY MOTOR OILS!

Construction company in Nebraska, operating 18 kinds of Caterpillar Diesel units and 40 Ford Trucks, using Phillips 66 Heavy Duty Motor Oils since 1941, reports: *No excessive oil consumption, carbon or sludge—No ring or valve trouble—Extremely clean engines at overhaul.*

Bus company in Oklahoma, operating over 140 city buses, reports: *Overhauls extended from 65,000 miles to better than 125,000 miles since changing to Phillips 66—No loss of power from sludge formation—Increased life for crankshafts and bearings—35 per cent less oil consumption—Considerably reduced engine deposits.*

Cab company in Illinois reports: *Cleaner engines since changing to Phillips 66—Less low-temperature sludge—Overhaul stretched out to between 85,000 and 125,000 miles—Lower maintenance costs—More efficient use of cabs.*

Cab company in Texas, operating 25 Ford radio cabs, using Phillips 66 Heavy Duty Motor Oils for nearly seven years, reports: *Top performance for at least 125,000 miles with no repairs, only tune-ups—No valve or bearing trouble since changing to Phillips 66.*

Cartage company in Missouri, operating 56 over-the-road tractor units and 55 city pick-ups, using Phillips 66 Heavy Duty Motor Oils for nearly five years, reports: *Wear, .003 to .005 per 100,000 miles—Sludge and varnish negligible—Bearings, no trouble—Fouling, none—Oil consumption, 128 miles per quart, with oil changes every 2,000 miles.*

Freight transportation company in Oklahoma, operating 80 Diesel tractors and 173 trailers, using Phillips 66 Heavy Duty Motor Oils since 1946, reports: *Remarkably clean engines at overhaul—Little sludge or wear.*

Test Phillips 66 Heavy Duty Motor Oils against the oil you are now using. A Phillips 66 Lubrication Engineer will be glad to help you set up a test. Write to: Sales Department, Phillips Petroleum Company, Bartlesville, Oklahoma.

Oil for the Engines of Commerce

Phillips 66

PHILLIPS 66 HEAVY DUTY MOTOR OILS

Fleetman's LIBRARY

For free publications included in this list of new fleet maintenance and safety literature, use the reader service postcard

Vehicle Cost Record Book

New 1956 edition of Autocar's "Cost Record" has just been announced by White Motor Co. It provides a comprehensive yet easily handled system of analyzing truck and fleet operating costs, can be used by most any truck-using business or any size truck fleet.

It provides 12-double-pages—one set for each month of the year. Space is provided for daily entry of such items as mileage, payload, cost and amount of fuel, cost and amount of oil, tire costs, maintenance parts and materials, maintenance labor, driver's wages, helper's wages, accidents, body repairs and two spare columns.

Each truck in the fleet should have one book and another could be used to enter total fleet costs. **For your free sample copy, circle L 1 on the postcard on page 84.**

Tractor-Trailer Training Manual

Pennsylvana Motor Truck Assn. has had printed a 146-page, spiral-bound manual for training tractor semi-trailer drivers. It can be used to train new drivers or to re-train and refresh experienced drivers. It aims to acquaint the trainee with operation of the vehicle, equip him with basic trucking industry data, familiarize him with basic maintenance skills, develop his ability to accept responsibility, make the trainee public relations conscious.

The manual was published by the Association's Council of Safety Supervisors in cooperation with the Bedford Motor Transport Driver's Training Program. It covers the setting-up of the training program, testing, vehicle mechanical operation, attitudes, driving techniques, driving safety, freight handling and loading, ICC safety regs, and trucking public relations.

You can order copies of this handy manual at $3.50 by sending your check to Pennsylvania Motor Truck Assn., Seventh Floor, Telegraph Bldg., Harrisburg, Pa.

Road Test Report

For a factual digest of the recent WASHO Road Test, fleet operators will want a copy of this new booklet from the National Highway Users Conference entitled, "Highlights of the WASHO Road Test." It is especially well illustrated.

It reviews the test layout, sections, vehicles, traffic and findings. You'll be particularly interested in the 11 point analysis of the findings in relation to your truck operation and the possible adverse use of the findings by anti-truck groups.

Single copies are available without charge by circling L 2 on the postcard on page 84.

Engine Wear Study Data

You've probably read quite a bit lately about use of radioactive materials in tracing engine wear. Here's an interesting report from The Texas Co. covering use of radioactive tracers in oil analysis, piston ring wear, gear wear and a brief review of future analytical possibilities.

Also of value to fleet operators will be the comment on some of the present limitations in this type of study. **For your free copy, circle L 3 on the postcard on page 84.**

Safety Service Guide

Most fleetmen are aware that the National Safety Council offers many aids to develop an effective accident prevention program. However, they seldom make use of the complete program offered by the Council.

To give fleetmen a comprehensive look at the full program, the Council's new guide, "Complete Motor Transportation Accident Prevention Service," has been made available. It covers both commercial vehicles and transit fields, gives detailed information on programs, awards, contests, literature, posters, films and incentives.

You can get a free copy of the guide by circling L 4 on the postcard on page 84.

Vehicle Lighting Specifications

American Trucking Assns.' Equipment and Maintenance Council is making available the full text of its electrical lighting and wiring specifications for commercial vehicle bodies. This data was reviewed by Commercial Car Journal last month (Jan., page 92).

It covers bulb and wire sizes, wiring and lamp location. It tells fleetmen how to specify new equipment, evaluate their present fleet. Copies are available from American Trucking Assns., 1424 Sixteenth St., N.W., Washington 6, D. C. Prices are 25¢ each for single copies, 20¢ each for 12 or more copies, 10¢ each for 100 or more copies. Ask for Recommended Equipment Specification No. E-3-1955.

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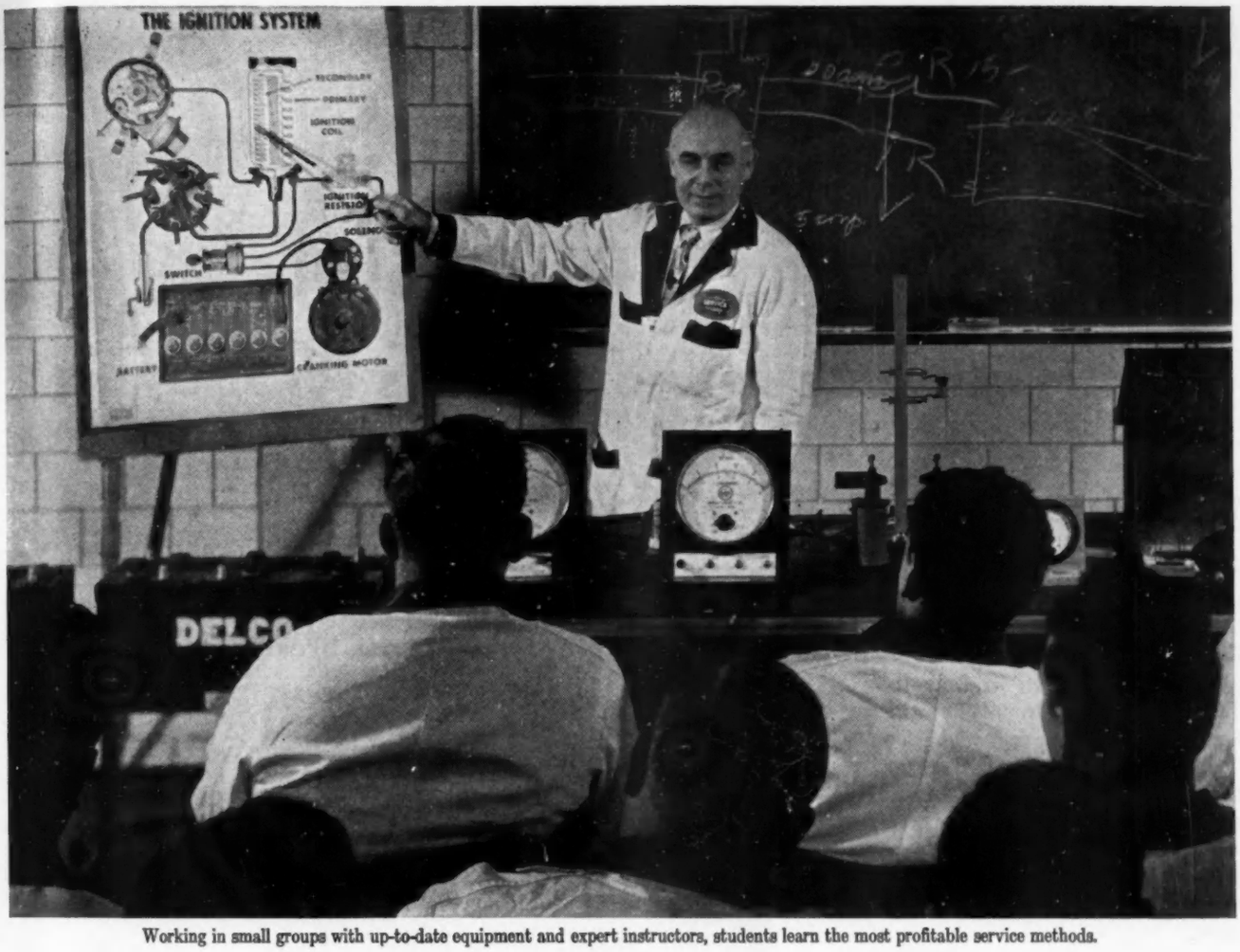


Working in small groups with up-to-date equipment and expert instructors, students learn the most profitable service methods.

How Delco-Remy training can increase your profits

A SPECIAL WEEK-LONG COURSE IS OFFERED AT 30 G. M. TRAINING CENTERS TO HELP YOU BOOST YOUR SERVICE BUSINESS

Speed and efficiency are your keys to success in the automotive service business. That's why the Delco-Remy training course, available to you at *no cost or obligation* through your local United Motors Service distributor, is one of the most valuable opportunities to come your way as you work to build your business.

For this course teaches speed and efficiency. It gives thorough training in up-to-date service methods and factory-specified procedures, with the aid of the most modern equipment and expert instructors.

The week-long course covers the checking, repairing and testing of Delco-Remy automotive electrical equipment such as voltage regulators, generators, cranking motors, distributors and batteries. Practical experience is gained in class, and special courses are available for fleet maintenance personnel.

There is no tuition; and supplies and equipment for this training are free of charge to the student . . . his only expenses are living accommodations, meals, and transportation.

If you are engaged in automotive service work, apply for this wonderful opportunity now . . . for yourself or for your employees . . . through your local UMS distributor.

Located conveniently across the country are thirty General Motors Training Centers like this one at Dedham, Massachusetts.

DELCO-REMY, DIVISION OF GENERAL MOTORS, ANDERSON, INDIANA

Delco-Remy

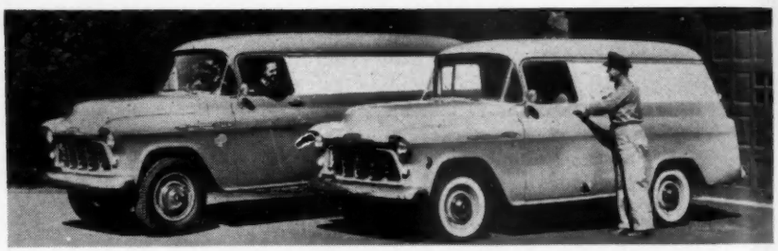
ELECTRICAL SYSTEMS

CHEVROLET'S New Transmission

Highlights Improvements for '56

A NEW AUTOMATIC transmission designed and developed by Allison Division of General Motors in conjunction with Chevrolet Motor Division was announced at the SAE meeting in Detroit in January. The transmission is a 6-speed unit with a torque converter and a new type of retarding device for auxiliary braking on hills. The CTP-4 Powermatic, as it is called, will be made available as optional equipment on 15 models in the two-ton group for 1956.

New "Powermatic" is optional on 15 models in the 2-ton group. It includes an integral hydraulic retarder to assist braking action



Chevrolet's '56 line includes 65 models on 15 wheelbases with automatic transmissions optional for all except school buses

Fully automatic, the CTP-4 is self-contained in one package and features a torque converter-type, full power shifting, heavy-duty transmission with six speeds forward and one reverse, plus an integral hydraulic retarder for braking action.

Braking Retarder

Controlled entirely by oil, the retarder relieves the service brakes from long downhill duty and provides the operator with a braking force approximately six times greater than that by engine braking.

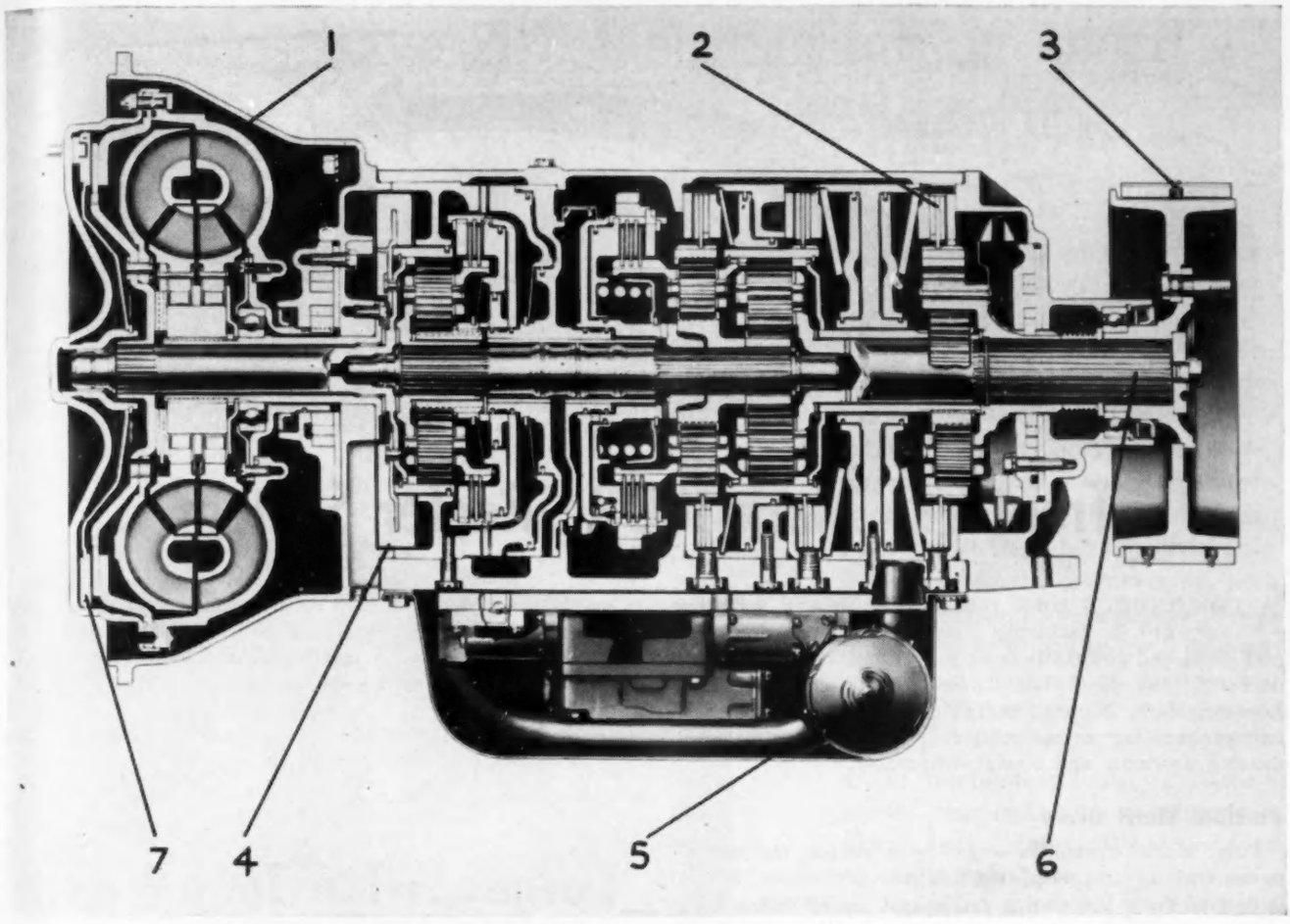
Operation is described as similar to the Powerglide in Chevrolet passenger cars. The Powermatic instantly and automatically balances engine power to the performance demand by selecting the most efficient gear ratios. In addition, a unique gear system makes at least two gear ratios available in each of the three forward ranges.

Six-Speed Gear Box

The torque converter is placed in series with a six-speed hydraulically controlled, automatic gear box. Starting in drive range from a standstill its torque is as much as 7.5 that of the engine. In low range, torque is as much as 14.8 times that of the engine. The high torque multiplication of the Powermatic converter for starting and six closely stepped ratios provide the most efficient use of engine power for any truck requirement—from the low 14.8-to-1 to 1-to-1. For best fuel economy, the converter is locked out when the vehicle is under way.

The "Drive" position of the selector starts the drive in the converter and automatically covers up- and downshifts of the top four gear ratios. The "Intermediate" position is designed for heavy traffic or rolling country and limits the number of shifts to the middle range. For heavy pulling on grades or loose surfaces the "Low" position of the selector limits the ratios to the converter and the two lower gears.

Augmenting the brake system, the retarder is located in series with the Powermatic gear train and



Detailed view of Chevrolet's new automatic, 6-speed transmission shows (1) torque converter, (2) the reverse gear clutch, (3) parking brake, (4) an hydraulic retarder to augment the brake system, (5) an oil sump, (6) transmission output shaft, (7) the converter lock-up clutch. Power take-off openings are placed on each side of unit

is operated by a pedal occupying the conventional clutch pedal position. When the pedal is depressed, oil floods a chamber of the transmission in which blades are rotating. As more oil pours into the chamber, offering more resistance, the blade rotation slows down, thereby slowing the drive shaft.

Retarder Details

Augmenting engine braking up to six times the braking force of the engine alone, the retarder gives the truck driver greater downhill control with little, or no use of the braking system. This reduces brake wear and the possibility of fade.

In addition to the retarder, the Powermatic includes a lock-up clutch which automatically comes into play at various engine speeds, depending on the vehicle speed and the throttle opening. This mechanism serves to transfer the coupling between the engine and transmission from the hydraulic force of the converter to a mechanical drive.

Power takeoffs for the operation of truck accessory equipment are provided for the first time on an automatic transmission.

Other 1956 Improvements

Chevrolet has announced the availability of 65 models on 15 different wheelbases for 1956. Automatic transmissions are optional for all except school buses. A new heavy duty five-speed manual shift transmission is available on a total of 17 two-ton models.

The Powerglide is available on the sedan delivery, and Hydra-Matic is offered on all other models below those using the Powermatic and the new five-speed units.

Safety advances include new sealed beam headlamps, an optional governor for the high powered truck V-8 and the retarder in the new transmission. Twelve volt electrical systems are used throughout the line. Tubeless tires are standard equipment on all models. Wheel mountings are improved for two-

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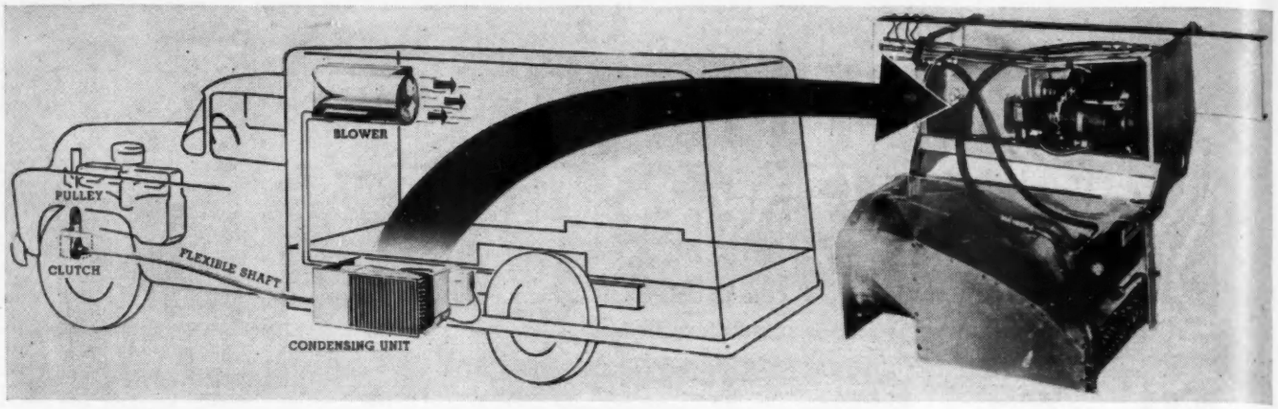


Tranter's "Mark 100B" Reefer System

A CONTINUOUS truck refrigeration system weighing only 410 lb, featuring simplicity of operation, fast pull down and automatic frost prevention, has been introduced by the Kold-Hold Division, Tranter Mfg., Inc., Lansing, Mich. Named the "Kold-Trux Mark 100B," this new package unit comes complete with power source, condensing assembly and blower evaporator.

Flexible Shaft Drive

This "Mark" system is driven by a simple, mechanical power train to save weight of auxiliary equipment. Power is derived from the engine crankshaft pulley through an electric clutch. It is then transferred to the condensing unit through a flexible shaft of the type used successfully in many other truck power-transmission applications. This entire assembly weighs 64 lb.

Stand-by power is provided by an electric motor that drives the condensing unit without operating the truck engine. In this way a smaller electric motor provides more tons of stand-by refrigeration. "Mark B" systems are available with 1, 1½, 2 and 3 hp capacity stand-by motors.

Fan on Cool Air Side

Fan and shrouding design of the system condenser utilize the entire coil surface for dissipation of heat. The fan is located on the cool air side of the coil where it is said to work more efficiently.

The entire condensing unit weighs 286 lb, including high-speed automotive-type compressor, 1 hp electric motor and other component parts. Skirt-mounted directly on the vehicle chassis, the condensing unit requires no "beefing up" of body structure. A "tilt-down" arrangement, as illustrated above, eases maintenance of the condenser, gives access to the compressor.

Independent Electrical System

The "Mark B" system has a "Turbo-Jet" blower to produce a complete cycle of air movement in seconds. Its entire coil surface is effective cooling area due to the unique shrouding and fan design. The complete blower weighs only 60 lb. Condenser and blower fans are driven by a high speed generator that requires no battery. Current is produced independently of the truck electrical system.

Compressor operates whenever the engine is running unless intentionally turned off by a switch provided. An anti-frost valve on the blower coil balances the system delivering the capacity needed for the load. It also prevents frost accumulation on the coil to eliminate loss of efficiency.

For further details on this new reefer system, circle P-40 on the postcard on page 84.

Dodge's ½-Ton "Town Wagon"

THE LOAD capacity of a panel truck, the comfort of a passenger car and the versatility of a station wagon are said to have been combined in a new vehicle announced by Dodge, the "Town Wagon."

The new vehicle will haul a payload of 1650 lb, carry eight persons in three seats or six passengers in two seats. Seats may be easily removed.

6 or 8-Cyl. Engine

The "Town Wagon" is built on a Dodge half-ton truck chassis with the choice of a 110-hp 6-cyl or a 169-hp "Power-Dome" V-8 engine. "Powerflite" automatic transmission is available on all models.

Three sliding windows on each side and two in the wide rear door give it the appearance of a regular station wagon. However, it has more ground clearance than passenger cars or regular station wagons to permit its use on country roads and in off-the-highway operations.

A load area at the rear provides cargo space for luggage, equipment, or supplies. Floor loading height is 23 in.

Batteries have 20% faster cranking speed... 10% more power in cold weather with

U. S. Peerless MICROPOROUS Rubber Separators!

A battery equipped with U. S. Peerless Microporous Rubber Separators has *power to spare* in frigid weather. Even when the temperature is zero, Peerless Separators deliver 10% more power and 20% faster cranking speed. That's because Peerless has *15% lower electrical resistance* than ordinary separators. This means greater battery capacity. Peerless also has other big advantages: it is unaffected by overcharging, heat, battery acid or plate pressures. It will not get mushy or soft and will maintain its original toughness throughout battery life. Make sure the batteries you order have Peerless Separators—they are so durable they actually outlast the plates... *and* make your operating cost figures look brighter. Write Electrical Wire and Cable Dept., United States Rubber Company, Rockefeller Center, New York 20, N. Y., for free copy of informative booklet.

US RUBBER

Electrical Wire and Cable Department

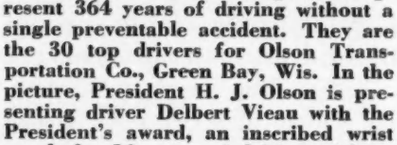
United States Rubber

FEBRUARY NEWS ROUNDUP

Olson's Top 30

The men in the above picture represent 364 years of driving without a single preventable accident. They are the 30 top drivers for Olson Transportation Co., Green Bay, Wis. In the picture, President H. J. Olson is presenting driver Delbert Vieau with the President's award, an inscribed wrist watch for 10 years of driving without a preventable accident. In addition to the awards presented to the 30 drivers at the fleet's safety dinner, 20 drivers received one-year safe driving awards, 17 received two- year awards, 11 received three-year awards, 16 received four-year awards, 18 received five-year awards, 18 received six-year awards, 14 received seven-year awards, eight received eight-year awards, and eight received nine-year safe driver awards, representing an additional 130 years of accident free driving.

Missouri B & T Officers



Newly-elected officers of the Missouri Bus & Truck Assn. are shown discussing plans for the coming year with U. G. Lewellen, association manager. From left are W. M. Keller of Kansas City, the Chief Freight Lines Co., the new association treasurer; Roy F. Reed, Joplin, Contract Freighters, Inc., president; Roy B. Chipps, Middlewest Freightways, Inc., St. Louis, 2nd vice president; and Lewellen, Jefferson City. Paul H. Byers of Byers Transportation, Inc., Kansas City, 1st vice president, was not present when the picture was taken.

Reo, Case History of an Independent Truck Maker

IN LIGHT of recent Washington hearings dealing in general with the effects of bigness in business and particularly with General Motors practices and how they influence small business, a look at the truck manufacturing industry proves interesting.

While GM was getting its lumps about its dominance in the bus field, there was practically no comment about the truck industry, particularly in the heavier weight categories. It is apparent that the same advantages of large scale operation that exist in the passenger car field do not apply in the manufacture of trucks, particularly above the 16,000 lb GVW category.

Reo for Example

An interesting case history of a company which certainly can be classed as a small producer and which a little more than a year ago was on the verge of liquidation, is provided by Reo. How this company, one of the oldest in the truck field, was brought back into the picture during the past year, is an interesting story showing again that with proper management smaller truck builders can survive and do right well against large competitors.

Just over one year ago, Bohn Aluminum and Brass Corp. bought Reo from Henney Motors Co., which had purchased it conditionally but was unable to complete the deal. An interesting side light is that Bohn itself owns about 67 per cent of the stock, with the remainder held by key Reo officials.

Rebuilding Organization

First objective of the new management was to rebuild the organization utilizing as much as possible of the original staff. Actually only one present officer of the firm, J. L. Adams, vice president in charge of sales, comes from the parent Bohn organization where he was assistant to the president. President John C. Tooker and all other vice presidents are veteran Reo employes. Biggest change was made in the field sales staff, where about 25 per cent of the organization represents new faces but men with many years of experience in the truck industry.

Reo doubled its monthly sales rate the third month after the new organization took over, has held or bettered that position since. Its 1955 sales are estimated at nearly 5000 units, approximately double the previous year. Being practically a privately held corporation, Reo is not required to divulge earnings and has not chosen to do so, but it is understood that the company has been in the black for a good part of the year on the basis of its increased sales.

Lighter Weight

A natural result of its tie-in with Bohn Aluminum is a program for developing light weight components using aluminum or other light metals. Objective is

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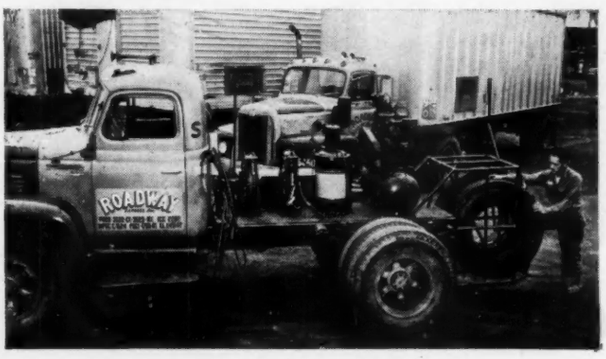

Roadway's Mobile Shop

Savings in man-hours have been accomplished by conversion of an International truck-tractor into a "portable" service shop at the Detroit terminal of Roadway Express, Inc. To speed up routine service checks of new diesel-powered International RD-205 Roadliners and 35-ft semi-trailers, Roadway compactly arranged all necessary tools on the truck's chassis. Before start of runs, tractor-trailer combinations are spotted in yard adjoining terminal. Using the "mobile" shop, mechanics check and repair trailer air and electrical systems, grease, check brake linings, inflate and change tires, pack wheels and perform other normal shop tasks. In addition to the time-saving factor, according to C. D. Long, terminal manager, the practice also frees regular shop for other than routine service, eliminates traffic congestion around 32-door terminal.

ATA WANTS IT*
Signal-Stat HAS IT!

* New ATA Recommended Equipment Specification E-3-1955

THE PROBLEM:

To improve truck lighting and cure "Sitting-Duck" accidents.

ATA RECOMMENDATION:

"The purpose of this ATA Recommended Equipment Specification is to establish uniform specifications for the wiring and lighting of commercial motor vehicles. It is intended that recommendations herein contained will be used when re-wiring old vehicles and also used as the specifications for wiring and lighting when new vehicles are being purchased. Safety, efficiency, performance and uniformity are the objectives of this recommended practice."

3.09 Turn signals are lamps which indicate a change in direction by giving flashing warning lights on the side toward which the turn will be made. (SAE Class A, Type 1, only are to be used.)

6.01 Front turn signals shall be of the double faced (amber to front, red to rear) Class A, Type 1, mounted in accordance with SAE mounting specifications except when impractical due to vehicle design.

6.04 Turn signals shall be wired in such a manner that they will flash simultaneously to indicate vehicle disability.

7.01 Stop-Tail photometric requirements shall be in accordance with the current SAE specifications.

THE PRODUCT THAT DOES IT:

Insist on Sigflare for all around signaling protection

SIGNAL-STAT SIGFLARE, the multi-purpose signaling system that conforms with every new ATA Lighting and Wiring Recommendation. It provides . . .

A—The most powerful Class A, Type 1, directional signals on the market with Double Face Lamps for front mounting and rear lamps to suit your individual installation.

B—The flare feature with positive pilot action that instantly and simultaneously flashes all 4 signal lamps to warn oncoming traffic that the vehicle is disabled.

C—2 Stop Lamps as powerful as Class A, Type 1, signal lamps.

D—2 Tail Lamps as powerful as the law allows.

. . . all in one system with as few as 4 Lamps and 1 Switch—a specially designed heavy duty flasher for tractors and combinations and a range of Stop/Tail lights for every type of installation—all exceeding SAE specifications.

For more information about *Sigflare* and a complimentary copy of the new ATA Lighting Recommendations, see your jobber, or write to:

Signal-Stat

DIRECTIONAL SIGNALS • SWITCHES • FLASHERS

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1955 New Truck Registrations by Makes by States*

STATE AND MONTH		Brock-way	Chev-rolet	Dia-mond T	Dodge	Ford	G.M.C.	Interna-tional	Mack	Reo	Stude-baker	White	Willys Jeep	Willys Truck	All Others	Total
Alabama	Nov.		815	3	121	554	304	152	38	3	4	14	9	9	14	2,038
	11 Mos.		7,180	25	1,091	5,625	1,889	1,459	209	26	92	176	58	81	40	17,951
Arizona	Nov.		385		66	236	123	76	4	2	25	3	27	36	9	992
	11 Mos.		2,758	7	635	2,038	828	558	37	16	142	37	120	242	67	7,486
Arkansas	Nov.		686	4	73	435	186	112	4		12	6	10	8		1,536
	11 Mos.		5,801	30	867	5,462	1,679	1,346	48	8	202	75	62	43	3	15,628
California	Nov.		2,748	24	432	2,239	867	402	24	28	69	43	65	151	103	7,195
	11 Mos.	4	27,445	301	6,636	25,309	8,168	5,432	356	250	1,050	853	1,237	1,891	1,680	80,612
Colorado	Nov.		330	1	49	203	128	71	3	1	8	7	33	47	22	903
	11 Mos.		3,847	25	824	3,245	1,126	1,109	92	43	157	111	472	655	164	11,870
Connecticut	Nov.	3	280	14	50	225	90	111	56	5	9	37	22	31	18	951
	11 Mos.	21	2,448	92	594	2,079	661	1,037	272	53	95	287	128	194	126	8,067
Delaware	Nov.		87		19	72	36	29	10		1	3	3	3	3	266
	11 Mos.	6	868	3	212	676	309	416	259	4	14	229	22	19	14	3,053
District of Columbia	Nov.		93		26	66	26	21	2	1		3	2	1	11	254
	11 Mos.	2	782	11	192	651	310	222	12	29	4	32	17	21	34	2,319
Florida	Nov.	1	912	10	138	640	262	194	92	11	32	66	63	57	41	2,519
	11 Mos.	1	8,505	63	1,482	8,060	2,256	1,973	486	118	336	560	404	628	245	25,115
Georgia	Nov.		760		118	674	148	148	25	1	18	26	10	2	4	1,934
	11 Mos.		9,193	31	1,698	8,775	2,138	2,098	285	41	273	327	105	85	22	25,071
Idaho	Nov.		158		23	154	61	31	4		6		17	41	1	496
	11 Mos.		1,895	12	491	1,563	745	767	43	4	149	37	171	388	31	6,296
Illinois	Nov.		1,026	25	204	850	184	333	5	5	24	28	38	30	17	2,767
	11 Mos.		11,638	398	2,730	10,864	2,521	5,385	226	128	403	490	322	324	301	35,730
Indiana	Nov.		1,012	34	168	685	239	294	18	16	49	84	16	17	92	2,724
	11 Mos.		9,329	126	1,742	7,925	1,984	3,822	159	114	633	631	131	195	361	27,132
Iowa	Nov.		392	9	71	305	62	155		2	9	20	10	8	7	1,050
	11 Mos.	2	4,995	114	1,003	5,046	891	2,759	57	18	138	128	61	91	94	15,397
Kansas	Nov.		576	2	49	463	127	179	1	7	12	6	3	19	3	1,447
	11 Mos.		5,946	31	673	5,182	1,304	1,787	4	44	174	100	75	156	46	15,522
Kentucky	Nov.		494		55	417	144	105	7	3	3	28	17	29		1,302
	11 Mos.		5,329	25	850	4,490	1,491	1,345	93	24	143	138	161	166	28	14,283
Louisiana	Nov.		727	8	86	492	153	132	11		5	19	13	12		1,658
	11 Mos.		7,532	40	1,150	7,066	1,636	1,701	81	10	222	162	139	89	18	19,848
Maine	Nov.		124	3	28	124	48	47	11		2	9	18	28	10	482
	11 Mos.	3	1,822	15	354	1,512	572	635	140	3	101	66	138	218	57	5,636
Maryland	Nov.	6	302	2	74	225	88	68	16	10	6	33	5	15	7	837
	11 Mos.	29	3,345	43	953	3,201	564	1,205	186	60	109	221	68	114	70	10,164
Massachusetts	Nov.	1	375	14	74	365	110	90	34	8	6	50	18	37	21	1,203
	11 Mos.	40	3,592	98	920	4,289	918	1,522	302	108	102	350	157	340	248	12,906
Michigan	Nov.		1,271	18	304	995	409	134	13	22	27	27	35	47	21	3,323
	11 Mos.		12,798	178	3,045	13,113	3,256	2,198	223	213	284	301	314	410	304	36,637
Minnesota	Nov.		260	10	31	176	68	83	2	4	6	8	11	21	12	692
	11 Mos.		5,000	78	978	5,103	1,244	2,174	99	39	217	97	96	218	111	15,454
Mississippi	Nov.		1,139		123	739	317	257	3		24	4	11	12	1	2,630
	11 Mos.		6,888	2	823	5,665	1,722	1,610	62	1	178	34	56	74	7	17,122
Missouri	Nov.		929	10	88	520	219	185	20	3	13	24	11	10	2	2,034
	11 Mos.		9,267	130	1,321	7,464	2,173	2,620	87	57	180	261	111	127	80	23,878
Montana	Nov.		231		41	214	79	72	4	2	11	6	24	50	5	739
	11 Mos.		2,350	3	496	2,056	825	946	61	20	171	68	205	522	59	7,782
Nebraska	Nov.		253	13	22	209	74	119	1	1	4	10	10	21	5	742
	11 Mos.		3,243	134	615	3,340	889	1,736	40	23	108	120	94	183	198	10,701
Nevada	Nov.		61		11	43	25	11			6	1	3	15		176
	11 Mos.		582	1	208	580	271	252	6	2	111	3	76	146	7	2,245
New Hampshire	Nov.	1	73		12	35	17	28	18	4		6	13	14	4	225
	11 Mos.	7	866	8	228	770	237	272	97	21	47	31	92	158	31	2,865
New Jersey	Nov.	15	632	20	136	501	179	136	55	5	10	69	18	39	40	1,855
	11 Mos.	172	6,090	141	1,862	6,082	2,054	2,030	549	55	163	638	135	280	367	20,618
New Mexico	Nov.		388		57	231	91	54	13		9	5	17	22	3	890
	11 Mos.		2,855	17	495	1,990	777	568	99	6	93	36	140	197	29	7,302
New York	Nov.	66	1,316	15	533	1,074	424	495	183	37	28	133	74	145	90	4,613
	11 Mos.	477	12,339	278	4,681	11,656	3,779	6,550	1,308	503	383	1,271	656	1,076	756	45,715
North Carolina	Nov.		884		118	603	188	116	63	8	18	30	10	14	4	2,057
	11 Mos.		9,066	36	1,363	7,470	1,936	1,637	409	29	310	335	165	146	54	22,956
North Dakota	Nov.		119		19	92	34	69			4		4	15		358
	11 Mos.		1,424	2	330	1,363	444	988	1		57	6	37	78	6	4,736
Ohio	Nov.		1,139	10	230	888	308	356	23	11	23	81	46	57	31	3,203
	11 Mos.	6	12,233	188	2,849	12,011	2,884	5,126	505	163	362	886	397	456	464	38,530
Oklahoma	Nov.		729	1	63	501	164	150	3	4	15	9	11	12	15	1,677
	11 Mos.		6,781	19	907	5,802	1,521	1,962	51	22	179	134	80	101	52	17,611
Oregon	Nov.		322		57	236	115	81	8	7	13	12	21	74	17	963
	11 Mos.		4,264	82	955	3,813	1,524	1,499	168	49	285	374	296	922	286	14,517
Pennsylvania	Nov.	31	1,169	19	278	948	345	425	127	16	27	84	9	134	33	3,645
	11 Mos.	223	12,030	187	3,601	11,606	3,063	5,907	1,059	213	488	950	81	981	299	40,688
Rhode Island	Nov.	2	96	3	17	63	15	27	6	2	2	5	1	2		241
	11 Mos.	4	815	43	187	789	157	375	96	21	29	65	16	39	33	2,671
South Carolina	Nov.		332		26	196	53	32	4		6	2	7	2	2	682
	11 Mos.		3,642	7	649	2,824	698	608	82	1	73	89	31	31	9	8,744
South Dakota	Nov.		123	3	22	91	32	57	2		4	1	16	17	3	371
	11 Mos.		1,285	23	300	1,438	397	979	4	4	59	17	105	148	5	4,764
Tennessee	Nov.		583	4	65	385	143	123	8	1	12	7	13	9	3	1,358
	11 Mos.		6,110	30	1,117	5,617	1,617	1,754	256	36	159	309	104	99	22	17,230
Texas	Nov.		2,134	9	185	1,331	423	286	22	4	37	34	56	34	18	4,573
	11 Mos.		29,392	124	3,455	23,633	4,866	6,538	431	47	668	1,086	521	462	159	71,382
Utah	Nov.		132	1	19	123	40	29		2		7	7	10	2	372
	11 Mos.		1,430	11	403	1,280	503	468	29	14	59	55	120	246	53	4,671
Vermont	Nov.		72		14	63	33	28	1	3			21	27		262
	11 Mos.	6	773	8	197	656	284	374	12	10	30	5	168	232	14	2,766
Virginia	Nov.	2	682	1	93	504	152	130	29	12	16	25	26	45	12	1,729
	11 Mos.	7	6,362	21	1,327	5,829	1,451	1,591	410	91	245	323	227	304	86	18,277
Washington	Nov.		335	4	85	265	179	112	5	4	12	9	30	47	13	1,100
	11 Mos.		4,026	56	1,267	3,992	1,836	1,740	146	49	193	238	279	537	203	14,562
West Virginia	Nov.		257		63	213	90	68	6	3	9	30	26	31	3	799
	11 Mos.		2,909	16	840	2,655	901	779	102	16	148	128	282	334	17	9,127
Wisconsin	Nov.		519	2	88	453	151	219	10	4	10	38	19	24	56	1,994
	11 Mos.		4,685	34	959	4,804	1,253	2,554	78	26	145	177	149	199	231	15,294
Wyoming	Nov.		115	1	13	67	50	51			7	2	8	36	3	353
	11 Mos.		1,335	6	248	1,059	472	449	14	3	53	26	148	378	28	4,219
Total	November, 1955	128	28,577	297	4,738	21,183	7,786	6,683	992	262	653	1,154	955	1,567	781	75,756
Total	November, 1954	122	23,791	219	5,173	17,831	5,294	7,200	534	175	856	920	695	1,473	452	64,735
Total	11 Months, 1955	1,010	295,090	3,353	60,803	267,520	75,004	92,860	8,831	2,835	10,016	13,073	9,229	15,022	7,822	863,266
Total	11 Months, 1954	1,232	270,660	2,433	55,182	245,753	61,807	77,376	5,591	2,124	9,249	10,565	6,674	8,684	4,684	762,216

* Data from R. L. Polk & Co.

CCJ's Truck Specifications

COMPILED FROM DATA SUPPLIED BY MANUFACTURERS

KEY TO DEFINITIONS

MAKE AND MODEL

Only Domestic Truck Models are listed.

OPTIONAL UNITS

For the express purpose of best fitting the truck to the individual job most of the models listed can be provided with optional engines, transmissions, axles, etc., and these models when so equipped are considered standard stock models.

CHASSIS LIST PRICE

The chassis list price applies to the minimum standard wheelbase with standard tires and standard equipment. All prices are F.O.B. factory. Chassis list price does not include the price of the Cab unless otherwise noted.

RECOMMENDED GROSS VEHICLE WEIGHT FOR NORMAL SERVICE

The Gross Weights published herewith are those supplied by manufacturers as their Recommended Gross Vehicle Weights for Normal Operating Conditions, and are based upon the Maximum Authorized Tire Size listed. In actual practice the manufacturer may either increase or decrease the gross vehicle weight rating when either favorable or unfavorable operating conditions are involved. Since the proper performance of a motor truck depends upon many factors, including grades, road conditions, etc., the gross weights that a manufacturer is prepared to recommend will vary with particular conditions, and the manufacturer's own standard of safety factors. Specific recommendations, therefore, should be obtained from the manufacturer's representative.

CHASSIS WEIGHT

The chassis weight listed includes the weight of the minimum standard wheelbase chassis, with cowl, with standard tires, with standard equipment, with crankcase and cooling system full, and 5 gallons of fuel in the tank. It does not include the weight of the Cab. This applies to C.O.E. as well as conventional chassis types. Exceptions are noted.

STANDARD TIRE SIZE

The standard tire size listed is that which is included in the Chassis List Price.

MAXIMUM AUTHORIZED TIRE SIZE

The tire size listed in this column is the maximum size recommended by the manufacturer of the chassis for the Gross Vehicle Weight for Normal Operating Conditions. It is furnished at extra cost, if it differs from the standard size. Dual rears are understood; exceptions noted.

MINIMUM STANDARD WHEELBASE

The minimum standard wheelbase is the so-called standard wheelbase on which the Chassis List Price is based.

MAXIMUM STANDARD WHEELBASE

The maximum standard wheelbase is the extreme end of the standard range of wheelbases offered by the chassis maker.

MAXIMUM BRAKE HP.

Maximum Brake Horsepower at Given R.P.M. is actual dynamometer reading without accessories.

GEAR RATIO RANGE

Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.

TRACTORS

Unless given the designation (N)— meaning not available as a tractor—all standard models may be assumed to be available as tractors. Exclusively Tractor models are designated (T).

KEY TO ABBREVIATIONS

MAKES—ALL

B—Bendix.
BL—Brown-Lipe.
Bu or Bud—Buda.
BW—Bendix-Westinghouse.
C—Chevrolet.
Cl or Cla—Clark.
Con—Continental.
Cu or Cum—Cummins-Diesel.
Eat—Eaton.
F—Ford.
Fu—Fuller.
G-H—Goodyear-Hawley type.
H—Hotchkiss.
Her—Hercules.
HS—Hall-Scott.
Int—International Harvester.
L—Lockheed.
LeR—LeRoi.
LH—Lockheed front, Wagner "hi-Tork" rear.
LT—Lockheed type front Timken rear.
LW—Lockheed front, Wisconsin rear.
M—Midland.
N.P.—New Process.
O or Ow—Own.
Op or Opt—Optional.
Shu—Shuler.
Spi—Spicer.
T or Tim — Timken-Detroit Axle Co.
Tw—Timken-Detroit—Westinghouse.
TW—Timken-Detroit—Wisconsin.
Var—Variable.
WG—Warner Gear.
Wau—Waukesha.
W or Wis—Wisconsin.
WE—Wagner Electric.
Wg—Wagner "hi-Tork."
Ws—Westinghouse.
WW—Westinghouse or Wagner

WHEELS DRIVEN

2F—Forward unit of Rear Axle Group.
2R—Rear Unit of Rear Axle Group.
4R—Forward and rear units of Rear Axle Group.
6—All wheels.

BRAKES—SERVICE

Location

4—Four Wheels, front and rear.
4r—Four Wheels, rear only.

Type

I—Internal.
X—External.

Operation

A—Air.
H—Hydraulic.
V—Vacuum.
D or Dp—Dual Primary.

BRAKES—HAND

Location

C—Center of double propeller shaft.
2—Rear wheels.
4—Four wheels.
6—Six wheels.
P—Back of Power Divider.
J—Jackshaft.
T—Transmission.
F—Driveshaft.

Type

D—Tru-Stop disk.
I—Internal.
M—Mechanical.
X—External.
PD—Two drums on rear of power divider.
F—Mechanical, foot operated

BRAKE DRUMS

Material

a—Cast alloy iron.
A—American Car Foundry
c—Cast iron.
Cc—Composite Front, Cast Iron in rear.
Ce—Centrifuse.
Cl—Copper iron.
Co—Composite.
CX—Front, centrifugal cast; rear, composite.
D—Dayton.
E—Ermalite.
G—Gunite.
N—Nickel iron.
S—Steel.

(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

FRAME

Type

C—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center.
Tf—Tapered front.
A—Straight section sidemembers, lined with oak inserts.
Z—Reinforced (X) member frame, box type sections.
BG—Box girder.
H—Heat treated.

REAR AXLE

Final Drive and Type

R—Bevel.
CD—Chain Drive.
F—Full-floating.
H or Hy—Hyphold.
d—Dual range axle.
2—Double Reduction.
S—Spiral bevel
W—Worm.
¾—Three Quarters Floating.
½—Semi-Floating.
T—Torque Tube.

GEAR RATIOS

(••) Only one ratio.

Drive and Torque

H—Hotchkiss (springs).
R—Radius Rods.
L—Parallel Torque Rods.
T—Torque Arm.

GOVERNOR STANDARD

Y—Yes.
N—No.

KEY TO REFERENCES

c.f.—Cab Forward design.
c.o.e.—Cab-Over-Engine design.
(D)—Diesel-engine equipped.
(T)—Designed for tractor use only.
(C)—Ford or Chevrolet Models.
(R)—Remanufactured Fords.
▲—Denotes "Includes Cab" when used with weights or prices.

AVAILABLE

•—Conventional or C.O.E. available.
†—Air brakes available.
—Two or three speed auxiliary transmission available.
△—Two speed rear axle available.

CHEVROLET

▼—Includes spare tire, full fuel tank and cooling system.
■—9.00/22 front tires are required when 10.00/22 dual rears are used.
‡—Trademaster V-8 engine available.
▽—Thriftmaster Heavy-Duty engine available.
††—Turbo-Fire 162, 170, 205 engines available.
‡‡—Taskmaster V-8 engine available.
++—5-speed transmission available.
▽▽—Powermatic available.
•••—Front, 2.30 x .702; rear, 2.30 x 1.16.
▲▲—"Jobmaster" engine optional.
¶—Overdrive optional.
§—Synchro-mesh 3-speed H.D. optional.
⊄—4 - speed synchro - mesh transmission optional.
••—4.11 available with optional overdrive; 3.55 available with optional powerglide.
‡—7.20 available.
□□—Two-speed rear axle available.
♦—3400,3500 and 3700 TM brakes as options.
§—Hydramatic available.
‡—4.11 available with optional overdrive.

COLEMAN

•—11.00/22 or 12.00/22 also available.
■—Fu5A65 also available.

DODGE

△—Front only; Rear 7.00/16S.
•—Front only; Rear 8.25/16S.
¶—Front only; Rear 7.50/20.
§—Front only; Rear 9.00/20.
†—Front only; Rear 10.00/20.
■—Front only; Rear 8.25/20.
•—Two speed rear axle available.
‡—Overdrive available.

DUPLEX

‡—Torque Divider, Timken T70-2 speed.

FABCO

††—see same footnote under Chevrolet.
•—With 2-speed transfer case
RC—Chevrolet axle remanufactured.
RF—Ford axle remanufactured.

FORD

▲—Courier 176-hp engine with Fordomatic.
††—F-350, 9800 lbs. G.V.W. with dual wheels.
■—F-600, C-600, B-600, 158-hp, and 168-hp (governed) H.D. Power King engines also available.
§—F-700, C-700, B-700, 168-hp Power King engine also available.
•—T-700, 302 cubic inch Cargo King engine also available.
†—F-750, C-750, 186-hp Cargo King engine also available.
●—F-800, C-800, F-900, C-900, 200-hp Cargo King engine also available.
••—F-700, F-750, B-700, B-750, C-700, C-750, only one ratio available.
▼—B-500 School Bus (cowl to axle dimension).
△—B-600 School Bus (cowl to axle dimension) 194 in. for 220 in. wheelbase.
‡—P-350 Parcel Delivery (cowl to axle dimension) 106 in. for 122 in. wheelbase.
†—F-500, 7½ in. x 2¾ in. x ¼ in. frame standard on 130 in. wheelbase; 9¼ in. x 2¾ in. x ¼ in. frame optional on 130 in. wheelbase, standard on 154 in. wheelbase.

KENWORTH

††—Timken T13129 PA Trailing Axle.
†—14.00/24, front; 16.00/24, rear.
●—C.O.E. optional.
•—One man cab.
▲—Torque converter plus Torquematic transmission optional.
■—Cab beside engine optional.
§—Both C.O.E. and cab beside engine optional.
††—14.00/24 front; 18.00/25 rear.
••—Cummins NHRB8ID 600.
‡‡—Allison TCL 654 plus TG 607.

MARMON-HERRINGTON

•—132" w.b. only; 154" w.b., 9¼ x 2¾ x ¼.
†—With single wheels; 10,200 with dual wheels.

NAPCO

•—NAPCO—Federal Truck Div., Northwestern Auto Parts Company (Chevrolet 4-wheel drive conversion).
††—See same footnote under Chevrolet.

OSHKOSH

▲—Includes cab.
■—1091 cu. in.
••—Hydraulic coupling optional.
△—Dependent upon engine.

REO

§—Model 331-OA and 331-OA LPG engines can be furnished.
‡—Two speed axle available.
▲—Double reduction and 2 speed available.
•—Buda 6DTS-468 diesel engine available.
‡—Model 255-OA-LPG or 292-OA engine can be furnished.
†—Front only; Rear 10.00/20.
‡—OH-160 or OH-160 LPG engine can be furnished.
■—OH-160LPG engine can be furnished.
▼—Model OV-220 engine can be furnished.
△—Model OV-225 engine can be furnished.
::—Model 8QW tandem axle can be furnished.

STUDEBAKER

•—Two speed 5.93–8.10 or 6.48–8.86 optional.
‡—Front only; rear 8.25/20D.
•—Front, centrifugal cast; rear, composite.

TRUCKSTELL

•—Single front, dual rear.
††—With 3 speed power divider.
§—Weight with cab and maximum tires.
▼—Including slip-over reinforcing frame channels.
†—Air brake optional.

WARD LA FRANCE

‡—Available with optional rear axles.
▲▲—Available with 11.00/22 or 12.00/20 tires for G.V.W. of 60,000 lbs and optional front and rear axles.
‡‡—Auxiliary transmission, Fuller 3A65, 3B65, 3A92 and 3B92.

WILLYS

•—Complete vehicle-Pick-up Type body.
‡—Three speed transmission, 2 speed transfer case.

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Line Number	MAKE AND MODEL	Chassis List Price	WHEELBASE Minimum Standard	WHEELBASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES Standard Front and Rear	TIRE SIZES D-dual rear S-single rear	TIRE SIZES Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings Number Diameter and Length	Governor Standard	TRANSMISSION Make and Model	Forward Speeds	REAR AXLE Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE Make and Model	BRAKES SERVICE Lining Area	BRAKES SERVICE Drum Area	BRAKES SERVICE Drum Material	BRAKES SERVICE Hand Location Type	C-A Dimensions (Min. Std. W. B.)	FRAME Side Rail Dimensions	FRAME Type
	Available		Opt	Opt						Wau 195OL	6-3½x4	265.6	2220	75	2800	4-2⅝x7⅛	N	Fu 5A33●	5Tim E100DH^	HF	H	** -6.20	Tim 32514	316	532a		TX	48	8x3½	C
1	*200		Opt	Opt	16500	▲57007.00/20D	8.25/20	Wau 195OK	6-4¼x4	320.6	2245	103	2800	4-2⅝x7⅛	Y	Fu 5A33●	5Tim E100DH^	HF	H	** -6.20	Tim 32514	316	532a		TX	48	8x3½	C
2	*225		Opt	Opt	17500	▲64007.50/20D	8.25/20	Wau 195OK	6-4¼x4	320.6	2245	103	2800	4-2⅝x7⅛	Y	Fu 5A33●	5Tim E100DH^	HF	H	** -6.20	Tim 32514	316	532a		TX	48	8x3½	C
3	*250		Opt	Opt	20000	▲66008.25/20D	9.00/20	Wau 195OK	6-4¼x4	320.6	2245	103	2800	4-2⅝x7⅛	Y	Fu 5A33●	5Tim H100DH	HF	H	** -6.17	Tim FC900	478	844a		TX	48	9x3½	C
4	*400		Opt	Opt	23000	▲70009.00/20D	10.00/20	Wau 135CK	6-4¼x5	426.3	3330	150	2800	3-3¼x14	Y	Fu 5A33●	5Tim L100DH	HF	R	** -6.17	Tim FD900	548	876a		TX	60	9½x3½	A
5	*500		Opt	Opt	24000	▲77009.00/20D	10.00/20	Wau 135CK	6-4¼x5	426.3	3330	150	2800	3-3¼x14	Y	Fu 5A33●	5Tim L100DH	HF	R	** -6.17	Tim FD900	548	876a		TX	60	9½x3½	A
6	*550		Opt	Opt	26000	▲83007.00/20D	10.00/20	Wau 135CK	6-4¼x5	426.3	3330	150	2800	3-3¼x14	Y	Fu 5A33●	5Tim L100DH	HF	R	** -6.17	Tim FD900	548	876a		TX	60	9½x3½	A
7	*600		Opt	Opt	27000	▲88008.00/20D	11.00/24	Wau 135CZ	6-4¼x5	451.6	3350	155	2800	3-3¼x14	Y	Fu 5A62●	5Tim R100DH	HF	R	** -6.83	Tim FD900	616	980a		TX	60	9½x3½	A
8	*620		Opt	Opt	28000	▲92008.00/20D	11.00/24	Wau 140GK	6-4¼x5½	525.6	4405	188	2800	3-3¼x13⅜	Y	Fu 5A65●	5Tim R100PA	HF	R	** -6.83	Tim FD900	616	980a		FD	60	9½x3½	A
9	(D) *620		Opt	Opt	29000	▲102008.00/20D	11.00/24	Cum NHB	6-5½x6	743.17	535	200	2100	7-4½x16½	Y	Spl 8051A●	5Tim R100PA	HF	R	** -5.29	Tim FE900	684	1141a		FD	60	9½x3½	A-D
10	(D) *630		Opt	Opt	40000	▲112008.00/20D	12.00/24	Cum NHB	6-5½x6	743.17	535	200	2100	7-4½x16½	Y	Spl 8051A●	5Tim U200PA	2F	R	** -7.03	Tim 27460	726	1160a		FD	60	9½x3½	L
11																															
12	Biederman	NSH	130	190	21000	60708.25/20D	10.00/20	Her JXLD	6-4¼x4	339.6	9272	131	3200	7-2⅛x10⅜	N	Fu 5A330	3Own	SF	H	** -7.2	TI FD900DPH	LH4IH	514	744G		T	60	9x3¾	BG
13		NSD	130	190	21000	60708.25/20D	10.00/20	Her JXLD	6-4¼x4	339.6	9272	131	3200	7-2⅛x10⅜	N	Spl 8434UP	3Own	2D	H	6.67-9.44	TI FD900DPH	LH4IH	514	744G		T	60	9x3¾	C
14		NSR	142	171	21000	74208.25/20D	10.00/20	Wau 140 GK	6-4¼x5½	525.6	4425	172	2600	7-3¼x13⅜	Y	Spl 6252●	5Tim H100DPH	2D	H	6.67-9.44	Tim 35141PX	T4A				T	60	9x3¾	C
15		HL	93	197	22000	72007.00/20D	10.00/24	Cum NHB	6-5½x6	743.17	535	200	2100	7-4½x16½	Y	Spl 8051A●	5Tim L100DH	2D	H	6.67-8.37	Tim 36000TW	T4A				T	81	10x3¾	C
16		CH	137	190	26000	78009.00/20D	10.00/20	Con T6427	6-4¼x4½	427.6	4350	170	3000	7-2⅝x13½	Y	Fu 5A620	5Tim QT300	2D	H	6.36-8.61	Tim FD900	BW41A	620	928G		TD	62	9x3¾	C
17	Chevrolet	D-56	115		4101	▼33116.70/15S	6.70/15S	O-Bl. Fl. 140††	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim H100DPH	SF	H	** -7.2	TI FD900DPH	LH4IH	514	744G		T	60	9x3¾	C
18		3A56	114		5000	▼24796.70/15S	7.00/15S	O-Th. Mas.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim H100DPH	2D	H	6.67-9.44	TI FD900DPH	LH4IH	514	744G		T	60	9x3¾	C
19		3B56			5000	▼34486.70/15S	7.00/15S	O-Th. Mas.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim H100DPH	HFd	H	6.67-9.44	Tim 35141PX	T4A				T	60	9x3¾	C
20		3C56	123		10000	▼27078.00/20S	8.00/20	O-Th. Mas. Sp.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim H100DPH	2D	H	6.67-9.44	Tim 35141PX	T4A				T	60	9x3¾	C
21	(e.f.)	3D56	104		10000	▼27078.00/20S	8.00/20	O-Th. Mas. Sp.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim L100DH	HF	R	** -6.17	Tim FD900	548	876a		TX	60	9½x3½	A
22	(e.f.)	3D56	125		10000	▼27538.00/20S	8.00/20	O-Th. Mas. Sp.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim L100DH	HF	R	** -6.17	Tim FD900	548	876a		TX	60	9½x3½	A
23	(e.f.)	3F56	137		12000	▼27538.00/20S	8.00/20	O-Th. Mas. Sp.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim L100DH	HF	R	** -6.17	Tim FD900	548	876a		TX	60	9½x3½	A
24		3E56	123		8800	▼28837.00/18S	8.00/20S	O-Th. Mas.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim L100DH	HF	H	** -5	Tim 36000TW	BW41A	620	928G		TD	62	9x3¾	C
25		3G56	135		6900	31378.00/18S	8.00/20	O-Th. Mas.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim L100DH	HF	H	** -4	57Own	T4A				T	60	9½x3½	A
26		4A56	130		14000	39107.00/22D	8.00/22A	O-Th. Mas.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	3Own	5Tim L100DH	HF	H	** -5	63Own	T-165	230	371Co	TM	T	60	9½x3½	A
27		4B56	154		15000	▼40717.00/22D	8.00/22A	O-Th. Mas.	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -5	63Own	T-342	375	597Ce	TM	T	60	9½x3½	A
28	(e.o.e.)	5D56	125		15000	▼25081.00/22D	9.00/22	O-Th. Mas.	6-3⅝x3⅜	236.8	5249	155	4200	5-2⅛x5	***	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
29	(e.o.e.)	5E56	136		15000	▼25081.00/22D	9.00/22	O-Th. Mas.	6-3⅝x3⅜	236.8	5249	155	4200	5-2⅛x5	***	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
30	(e.o.e.)	5F56	160		15000	▼25161.00/22D	9.00/22	O-Th. Mas.	6-3⅝x3⅜	236.8	5249	155	4200	5-2⅛x5	***	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
31		6F56	130		15000	▼43298.00/22D	9.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
32		6G56	154		15000	▼43938.00/22D	9.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
33		6H56	172		15000	▼44888.00/22D	9.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
34	(e.o.e.)	5A56	1121		15000	▼24961.00/22D	10.00/22	O-Trk. Mas.	6-3⅝x3⅜	236.8	5249	155	4200	5-2⅛x5	***	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
35	(e.o.e.)	5B56	1361		19500	▼35081.00/22D	10.00/22	O-Trk. Mas.	6-3⅝x3⅜	236.8	5249	155	4200	5-2⅛x5	***	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
36	(e.o.e.)	5C56	1601		19500	▼35161.00/22D	10.00/22	O-Trk. Mas.	6-3⅝x3⅜	236.8	5249	155	4200	5-2⅛x5	***	4Own	5Tim L100DH	HF	H	** -6	17Own	T-342	382	597Ce	TM	T	60	9½x3½	A
37		6B56	150		19500	▼43298.00/22D	10.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-346	382	597Ce	TM	T	60	9½x3½	A
38		6C56	172		19500	▼43938.00/22D	10.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-346	382	597Ce	TM	T	60	9½x3½	A
39	(Sc. Bus Ch.)	4C56	154		12000	▼42787.00/22D	8.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-346	382	597Ce	TM	T	60	9½x3½	A
40	(Sc. Bus Ch.)	6D56	194		16000	▼48128.00/22D	9.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-346	382	597Ce	TM	T	60	9½x3½	A
41	(Sc. Bus Ch.)	6E56	220		16000	▼48878.00/22D	9.00/22	O-T.M.HD	6-3⅝x3⅜	236.8	0210	140	4200	4-2⅛x5	8	4Own	5Tim L100DH	HF	H	** -6	17Own	T-346	382	597Ce	TM	T	60	9½x3½	A
42	Dodge	C-3-BL6	108	108	4250	21006.70/15S	6.70/15S	Own TI-334	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	TI-334	HF	H	** -7.2	TI FD900DPH	LH4IH	514	744G		T	60	9x3¾	C
43		C-3-B6	108	116	5100	22506.70/15S	7.10/15S	Own T-334	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-334	2D	H	6.67-9.44	TI FD900DPH	LH4IH	514	744G		T	60	9x3¾	C
44		C-3-C6	116	116	5100	21506.70/15S	7.00/15S	Own VT-334	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-334	HFd	H	6.67-9.44	Tim 35141PX	T4A				T	60	9x3¾	C
45		C-3-C8	116	116	6800	24757.00/15S	7.00/15S	Own T-396	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-396	2D	H	6.67-9.44	Tim 35141PX	T4A				T	60	9x3¾	C
46		C-3-C8	116	126	8800	27756.50/16S	6.50/16S	Own T-336	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-336	HF	H	** -5	14Own	T-336	184	277Co	TM	T	48	8x2½	C
47		C-3-D6	102	117	7900	27756.50/16S	6.50/16	Own T-164	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-164	HF	H	** -5	14Own	T-164	184	277Co	TM	T	48	8x2½	C
48		C-3-D8	126	126	8800	28756.00/16SA	8.25/16S	Own VT-338	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	VT-338	HF	H	** -5	14Own	T-338	209	316Co	TM	T	48	8x2½	C
49		C-3-EU6	142	142	10100	60007.50/16S*	9.00/16S	Own T-165	6-3¼x4½	230.7	3191	103	3600	4-2⅜x4	8	3Own	T-165	HF	H	** -5	63Own	T-165	230	371Co	TM	T	60	9½x3½	A
50		C-3-F6	129	153	14000	36006.50/20D	7.50/20	Own T-342	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-342	HF	H	** -5	63Own	T-342	375	597Ce	TM	T	60	9½x3½	A
51		C-3-F8	129	153	14000	37006.50/20D	7.50/20	Own VT-342	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	VT-342	HF	H	** -5	63Own	VT-342	375	597Ce	TM	T	60	9½x3½	A
52		C-3-G6	129	171	15000	40236.50/20D	8.25/20	Own TX-342	6-3¼x4½	230.7	2517	120	3600	4-2⅜x5	1	3Own	TX-342	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
53		C-3-G8	129	193	15000	50006.50/20D	8.25/20	Own VTX-342	6-3¼x4½	230.7	2517	120	3600	4-2⅜x5	1	3Own	VTX-342	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
54		C-3-H6	129	193	17000	42507.50/20D	9.00/20	Own T-344	6-3¼x4½	230.7	2517	120	3600	4-2⅜x5	1	3Own	T-344	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
55		C-3-H8	129	193	17000	43007.50/20D	9.00/20	Own TS-344	6-3¼x4½	230.7	2517	120	3600	4-2⅜x5	1	3Own	TS-344	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
56		C-3-HM6	129	193	17000	43007.50/20D	9.00/20	Own VTX-344	6-3¼x4½	230.7	2517	120	3600	4-2⅜x5	1	3Own	VTX-344	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
57		C-3-HH6	108	162	17250	43007.50/20D	9.00/20	Own T-346	6-3¼x4½	230.7	2707	125	3600	4-2⅜x5	1	3Own	T-346	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
58		C-3-HH8	129	193	18000	7.50/20D	9.00/20	Own VTX-346	6-3¼x4½	230.7	2707	125	3600	4-2⅜x5	1	3Own	VTX-346	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
59		C-3-HHM6	108	162	18250	7.50/20D	9.00/20	Own TT-356	6-3¼x4½	230.7	2707	125	3600	4-2⅜x5	1	3Own	TT-356	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
60		C-3-J6	129	171	18000	42507.50/20D	9.00/20	Own T-346	6-3¼x4½	230.7	2657	125	3600	4-2⅜x5	1	3Own	T-346	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
61		C-3-J8	129	171	18000	43257.50/20D	9.00/20	Own VT-346	6-3¼x4½	230.7	2707	125	3600	4-2⅜x5	1	3Own	VT-346	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
62		C-3-K6	108	162	18250	47507.50/20D	9.00/20	Own T-358	6-3¼x4½	230.7	2657	125	3600	4-2⅜x5	1	3Own	T-358	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
63		C-3-K8	129	171	19500	50758.25/20D	9.00/20	Own VTX-358	6-3¼x4½	230.7	2657	125	3600	4-2⅜x5	1	3Own	VTX-358	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
64		C-3-KM6	108	162	19500	52757.50/20D	9.00/20	Own TT-358	6-3¼x4½	230.7	2657	125	3600	4-2⅜x5	1	3Own	TT-358	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
65		C-3-L6	132	174	21000	52757.50/20D	10.00/20	Own VT-350	6-3¼x4½	230.7	3317	144	3600	4-2⅜x5	1	3Own	VT-350	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
66		C-3-T6	132	174	22500	59508.25/20D	10.00/20	Own VTX-350	6-3¼x4½	230.7	3317	144	3600	4-2⅜x5	1	3Own	VTX-350	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
67		C-3-T8	132	174	27000	63509.00/20D	11.00/20	Own T-352	6-4⅛x5	1136	5344	171	3200	7-3¼x11	2	3Own	T-352	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
68		C-3-Y6	130	190	29000	70509.00/20D	11.00/20	Own T-362	6-4⅛x5	1136	5344	171	3200	7-3¼x11	2	3Own	T-362	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
69		C-3-Y8	132	174	27000	63509.00/20D	11.00/20	Own VTX-350	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	VTX-350	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
70	(e.f.)	C-3-GN6	116	126	6000	21506.00/15S	7.00/16	Own T-361	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-361	HF	H	6.67-9.44	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
71	(e.f.)	C-3-GN8	116	126	9000	25507.00/16S	7.00/16	Own T-362	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-362	HF	H	6.67-9.44	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
72	(Sc. Bus)	C-3-FS6	129	145	14500	33506.50/20S	7.50/20	Own T-364	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	T-364	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
73	(Sc. Bus)	C-3-FS8	153	153	19000	40756.50/20S	7.50/20	Own TS-342	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	TS-342	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
74	(Sc. Bus)	C-3-HS6	129	145	14500	33506.50/20S	7.50/20	Own TS-344	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	TS-344	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
75	(Sc. Bus)	C-3-HS8	153	153	19000	40756.50/20S	7.50/20	Own TS-344	6-3¼x4½	230.7	3194	110	3600	4-2⅜x4	8	3Own	TS-344	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A
76	(Sc. Bus)	C-3-HS6	129	193	16000	47007.50/20D	8.25/20	Own TS-344	6-3¼x4½	230.7	2517	120	3600	4-2½x5	1	3Own	TS-344	HF	H	6.83-8.37	Tim 32516nx8	OT41HV	425	666Ce	TX	T	60	9½x3½	A

For Key to References and Abbreviations See Page 99

(Turn to Page 102, Please)

SIGN OF THE BEST

WHERE THE SERVICE IS SURE

PureTruck Stations offer tops in service, food, and comfort

Here's the sign that marks the best on-the-road service available—the PureTruck Station sign!

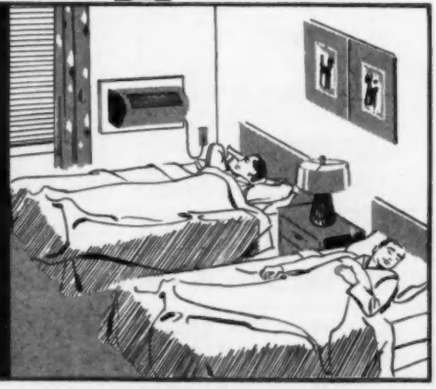
PureTruck Stations are specially designed to serve truckers with complete, one-stop service—24-hour service that includes excellent food, modern overnight accommodations, and truck-size service facilities. They feature wide approaches and drives—vast parking and turning areas . . . and top-quality PURE products for all types of equipment. And they're manned by thoroughly trained truck experts to give your equipment the care it deserves.

So be *sure*. Make it a point to have your drivers stop at the PureTruck Station sign on every trip.

Be sure with Pure

Complete, one-stop service by experts is just one of the reasons for stopping at PureTruck Stations.

Good food at popular prices makes it a pleasure for your drivers to pull in at the PureTruck Station sign.



Clean, modern facilities are featured at PureTruck Stations. Many have showers, motel or individual sleeping room accommodations.

(Continued from Page 100)

Line Number	MAKE AND MODEL	Chassis List Price	WHEELBASE Minimum Standard	WHEELBASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number	Main Bearings: Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Speeds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operation	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	Dodge—Cont'd																															
1	(Sc. Bus) C-3-HS8		193	193	16000	4775	7.50/20D	8.25/20	Own VTS-344	8–3⅞x3¼	259	7.6	243	169–4400	5	2¾x4.8	N	NP 90240	4	Own VTS-344●	HyF	H	6.29–6.83	Own VTS-344	O4IHV	336	480	Co	TX	.....	⅞x2⅜x9⅜	C
2	(Sc. Bus) C-3-HS6		217	217	17000	4925	7.50/20D	8.25/20	Own TS-344	6–3⅞x4½	251	7.0	210	120–3600	4–5	2½x5.1	N	NP 90240	4	Own TS-344●	HyF	H	6.29–6.83	Own TS-344	O4IHV	336	480	Co	TX	.....	⅞x2⅜x9⅜	CC
3	(Sc. Bus) C-3-HS8		217	217	17000	5000	7.50/20D	9.00/20	Own VTS-344	8–3⅞x3¼	259	7.6	243	169–4400	5	2¾x4.8	N	NP 90240	4	Own VTS-344●	HyF	H	6.29–6.83	Own VTS-344	O4IHV	336	480	Co	TX	.....	⅞x2⅜x9⅜	CCC
4	(Sc. Bus) C-3-JS6		217	217	17500	5075	7.50/20D	9.00/20	Own TS-346	6–3¼x4⅛	265	7.0	225	125–3600	4–5	2½x5.1	Y	NP 90450	4	Own TS-346●	HyF	H	6.29–6.83	Own TS-346	O4IHV	432	604	Co	TX	.....	⅞x2⅜x9⅜	CC
5	(Sc. Bus) C-3-JS8		217	217	17500	5150	7.50/20D	9.00/20	Own VTS-346	8–3⅜x3¼	270	7.6	256	175–4400	5	2¾x4.8	Y	NP 90450	4	Own VTS-346●	HyF	H	6.29–6.83	Own VTS-346	O4IHV	432	604	Co	TX	.....	⅞x2⅜x9⅜	CC
6	(Sc. Bus) C-3-RS8		239	239	21000	6250	7.50/20D	9.00/20	Own VTS-348	8–3⅛x3⅝	331	7.2	303	193–4000	5	2½x5.1	Y	NP 90040	5	Tim H-100●	HyF	H	6.8–7.2	Tim 32516	O4IHV	397	610	e	TX	.....	⅞x2⅛x9⅛	CP
7	Duplex.....T		136	220	20000	6600	8.25/20D	9.00/20	Her JXD	6–4x4¼	320	6.2	240	113–3000	7	2½x10⅛	Y	Fu 5B330	5	Tim H100	B	H	** –7.20	Tim FC900	L4IHV	420	654	a	TX	57¾	9⅛x3⅛x⅞	CCP
8	.....TH-404		136	220	20000	6900	8.25/20D	9.00/20	Her WXLC-3	6–4¼x4¾	404	5.8	312	139–2600	7	2⅝x13¼	Y	Fu 5A430	5	Tim H-300	DF	H	6.13–8.15	Tim FC900	L4IHV	420	654	a	TX	49⅛	9⅛x3⅛x⅞	CP
9	.....R		136	220	28000	8820	9.00/20D	10.00/20	Her WXLC-3	6–4¼x4¾	404	5.8	312	139–2600	7	2⅝x13¼	Y	Fu 5A43	5	Tim Q300	DF	R	6.42–8.38	Tim FD900	L4IHV	730	1016	a	TX	49⅛	9⅛x3⅛x⅞	AP
10	.....SH-529		172	208	28000	9500	10.00/20	11.00/20	Her RXC	6–4⅝x5⅛	529	5.4	395	132–2300	7	3x13¼	Y	Fu 5A620		Tim Q200	2F	R	** –7.77	Tim FD900	BW4IA	730	1016	a	TX	61⅛	9⅛x3⅛x⅞	AP
11	.....L-6602		164	200	37000	11650	11.00/20D	11.00/20	Con R6602	6–4⅛x5¾	602	6.1	465	200–2600	7	3¼x14⅛	Y	Fu 5C650	5	Tim U200	DF	R	** –9.83	Tim FE900	BW4IA	912	1311	a	TX	73⅛	10⅛x3⅛x⅞	BP
12	.....KH		148	220	34000	10500	11.00/20D	11.00/20	Her RXC	6–4⅛x5¼	529	5.4	395	132–2300	7	3x13¼	Y	Fu 5A620	5	Tim U-200	2F	R	** –9.83	Tim FE900	BW4IA	912	1311	a	TX	60¾	10⅛x3⅛x⅞	BP
13	.....LH		148	220	37000	11300	11.00/20D	11.00/20	Her RXLD	6–4¾x5¼	558	5.4	430	154–2400	7	3½x13¾	Y	Fu 5C650	5	Tim U-200	2F	R	** –9.83	Tim FE900	BW4IA	912	1311	a	TX	60¾	10⅛x3⅛x⅞	BP
14	Federal....400R-1		133	193	29000	8645	10.00/20	11.00/20	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim Q-100	Hy	R	4.63–7.8	Tim FE-900	T4IA	579	928	a	T	60	10¼x3⅛x⅞	CCC
15	.....400R-2		133	193	29000	8810	10.00/20	11.00/20	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim Q-200	Hy	R	7.64–8.38	Tim FE-900	T4IA	579	928	a	T	60	10⅛x3⅛x⅞	CCC
16	.....400R-3		133	193	29000	8875	10.00/20	11.00/20	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim Q-300	Hy	R	5.69–6.42	Tim FE-900	T4IA	579	928	a	T	60	10⅛x3⅛x⅞	CCC
17	.....400R-4		133	193	31000	8760	10.00/20	11.00/22	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim R-100	Hy	R	5.91–9.76	Tim FE-900	T4IA	579	928	a	T	60	10⅛x3⅛x⅞	CCC
18	.....400R-5		133	193	31000	8920	10.00/20	11.00/22	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim R-300	H2	R	4.41–7.40	Tim FE-900	T4IA	579	928	a	T	60	10⅛x3⅛x⅞	CCC
19	.....400R-6		133	193	31000	8980	10.00/20	11.00/22	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim U-200	H2	R	5.91–9.76	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
20	.....400R-7		133	193	36000	9130	11.00/20	12.00/20	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim U-300	H2	R	4.41–7.09	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
21	.....400R-8		133	193	36000	9260	11.00/20	12.00/20	Con T6427	6–4⅛x4⅞	427	6.4	350	170–3000	7	2⅞x13½	Y	Cla 290V	5	Tim R-100	H	R	4.11–7.40	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
22	.....500R-1		133	193	33000	9625	11.00/20	11.00/22	Con U6501	6–4½x5¼	501	6.1	413	182–2800	7	2¾x14⅜	Y	Fu 5A65	5	Tim R-200	H2	R	5.91–9.76	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
23	.....500R-2		133	193	33000	9780	11.00/20	11.00/22	Con U6501	6–4½x5¼	501	6.1	413	182–2800	7	2¾x14⅜	Y	Fu 5A65	5	Tim R-300	H2	R	4.41–7.40	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
24	.....500R-3		133	193	33000	9840	11.00/20	11.00/22	Con U6501	6–4½x5¼	501	6.1	413	182–2800	7	2¾x14⅜	Y	Fu 5A65	5	Tim U-200	H2	R	5.91–9.76	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
25	.....500R-4		133	193	37000	9990	11.00/20	12.00/20	Con U6501	6–4½x5¼	501	6.1	413	182–2800	7	2¾x14⅜	Y	Fu 5A65	5	Tim U-300	H2	R	4.41–7.09	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
26	.....500R-5		133	193	37000	10140	11.00/20	12.00/20	Con U6501	6–4½x5¼	501	6.1	413	182–2800	7	2¾x14⅜	Y	Fu 5A65	5	Tim U-200	H2	R	5.91–9.76	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
27	.....600R-1		133	193	39000	10702	11.00/22	12.00/24	Con R6602	6–4⅝x5⅝	602	6.2	480	212–2800	7	3¼x14½	Y	Fu 5A65	5	Tim U-300	H2	R	4.41–7.09	Tim FE-900	T4IA	713	1032	a	T	60	10⅛x3⅛x⅞	CCC
28	.....600R-2		133	193	39000	10852	11.00/22	12.00/24	Con R6602	6–4⅝x5⅝	602	6.2	480	212–2800	7	3¼x14½	Y	Fu 5A65														
	Ford Courier																															
29	Sedan Divy	1151	1151		4600	▲3260	6.70/15S	7.10/15S	Own	6–3.62x3.6	223	8.0	202	137–4200	4	2.5x3.98		Own	3	Own	H½	H	4.09–4.27	Own	O4IH	192	.....	2IM	.....	4x2x⅞		....
30	Sedan Divy	1151	1151		4600	▲3360	6.70/15S	7.10/15S	Own	8–3.62x3.3	272	8.0	260	173–4400	5	2.5x3.57		Own	3	Own	H½	H	4.09–4.27	Own	O4IH	192	.....	2IM	.....	4x2x⅞		....
	F-100																															
31	Cowl		110	110	5000	2280	6.70/15S	6.50/16S	Own	6–3.62x3.6	223	7.8	202	133–4000	4	2.5x3.98		Own	3	Own	H½	H	....3.92	Own	O4IH	179	259	2IM	41	5⅜x2¼x⅞		CC
32	Cowl		110	110	5000	2380	6.70/15S	6.50/16S	Own	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	3	Own	H½	H	....3.73	Own	O4IH	179	259	2IM	41	5⅜x2¼x⅞		CC
	F-250																															
33	Cowl		118	118	7400	2620	6.50/16S	8.00/20S	Own	6–3.62x3.6	223	7.8	202	133–4000	4	2.5x3.98		Own	3	Own	HF	H	....4.88	Own	O4IH	198	305	TX	49	6x2¼x⅞		CC
34	Cowl		118	118	7400	2725	6.50/16S	8.00/20S	Own	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	3	Own	HF	H	....4.56	Own	O4IH	198	305	TX	49	6x2¼x⅞		CC
	F-350																															
35	Cowl		130	130	††9800	2990	8.00/18S	8.00/18	Own	6–3.62x3.6	223	7.8	202	133–4000	4	2.5x3.98		Own	3	Own	HF	H	5.14–5.83	Own	O4IH	231	355	TX	61	7x2¾x⅞		CC
36	Cowl		130	130	††9800	3090	8.00/18S	8.00/18	Own	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	3	Own	HF	H	4.86–5.14	Own	O4IH	231	355	TX	61	7x2¾x⅞		CC
	F-500																															
37	Cab		130	154	15000	▲4230	7.00/22D	8.00/22	Own	6–3.62x3.6	223	7.8	202	133–4000	4	2.5x3.98		Own	4	Own	HF	H	6.20–6.80	Own	O4IH	366	561	TX	61	†		CC
38	Cab		130	154	15000	▲4370	7.00/22D	8.00/22	Own	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	4	Own	HF	H	5.83–6.20	Own	O4IHV	366	561	TX	61	†		CC
	F-600																															
39	Cab		130	172	17000	▲4655	8.00/22D	9.00/22	Own	6–3.62x3.6	223	7.8	202	133–4000	4	2.5x3.98		Own	4	Own	HF	H	6.80–7.20	Own	O4IHV	366	561	TX	61	9¼x2⅜x¼		CC
40	Cab		130	172	17000	▲4755	8.00/22D	9.00/22	Own■	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	4	Own	HF	H	6.20–6.80	Own	O4IHV	366	561	TX	61	9¼x2⅜x¼		CC
	F-700																															
41	Cab		132	192	21000	▲5360	8.00/22D	10.00/22	Own◆	8–3.62x3.3	272	7.6	247	158–3800	5	2.5x3.57	Y	Own	4	Own	HF	H	** –7.17	Own	O4IHV	444	697	TX	61	9x3x¼		L
	F-750																															
42	Cab		132	192	21000	▲5735	9.00/22D	10.00/22	Own◆	8–3.62x3.7	302	7.5	279	175–3800	5	2.62x4.2	Y	Own	5	Own	HF	H	** –7.17	Own	O4IHV	444	697	TX	61	9x3x¼		L
	F-800																															
43	Cab		132	192	24000	▲6275	10.00/22D	11.00/22	Own●	8–3.8x3.7	332	7.5	306	190–3800	5	2.62x4.2	Y	Own	5	Own	SF	H	7.17–7.67	Own	O4IHV	485	729	TX	61	9x3x¼		L
	F-900																															
44	Cab		132	192	29000	▲6565	11.00/22D	12.00/22	Own●	8–3.8x3.7	332	7.5	306	190–3800	5	2.62x4.2	Y	Own	5	Own	SF	H	7.67–7.17	Own	O4IHV	542	829	TX	61	9x3x¼		L
	T-700																															
45	Cab		144	192	28000	▲7630	8.00/22D	9.00/22	Own*	8–3.62x3.3	272	7.6	247	158–3800	5	2.5x3.57	Y	Own	5	Own	HF	H	7.79–6.70	Own	O6IHV	625	980	TX	73	9x3x¼		L
	T-750																															
46	Cab		144	192	36000	▲8930	9.00/22D	10.00/22	Own●	8–3.8x3.7	332	7.5	306	190–3800	5	2.62x4.2	Y	Own	5	Own	HF	H	7.79–7.07	Own	O6IHV	756	1170	TX	73	9¼x3½x⅜	L	L
	T-800																															
47	Cab		144	192	42000	▲9390	10.00/22D	11.00/22	Own●	8–3.8x3.7	332	7.5	306	190–3800	5	2.62x4.2	Y	Own	5	Own	SF	H	8.60–7.80	Own	O6IHV	837	1232	TX	73	9¼x3½x⅜	L	L
	C-500 (c. f.)																															
48	Cab		110	158	15000	▲4570	7.00/22D	8.00/22	Own	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	4	Own	HF	H	5.83–6.20	Own	O4IHV	366	561	TX	60	9¼x2⅜x¼	C	C
	C-600 (c. f.)																															
49	Cab		110	158	17000	▲4810	8.00/22D	9.00/22	Own■	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	4	Own	HF	H	6.20–6.80	Own	O4IHV	366	561	TX	60	9¼x2⅜x¼	C	C
	C-700 (c. f.)																															
50	Cab		116	156	21000	▲5660	8.00/22D	10.00/22	Own◆	8–3.62x3.3	272	7.6	247	158–3800	5	2.5x3.57	Y	Own	4	Own	HF	H	** –7.17	Own	O4IHV	444	697	TX	66	9x3x¼		L
	C-750 (c. f.)																															
51	Cab		116	156	21000	▲5940	9.00/22D	10.00/22	Own◆	8–3.62x3.7	302	7.5	279	175–3800	5	2.62x4.2	Y	Own	5	Own	HF	H	** –7.17	Own	O4IHV	444	697	TX	66	9x3x¼		L
	C-800 (c. f.)																															
52	Cab		116	156	24000	▲6330	10.00/22D	11.00/22	Own●	8–3.8x3.7	332	7.5	306	190–3800	5	2.62x4.2	Y	Own	5	Own	SF	H	7.17–7.67	Own	O4IHV	485	729	TX	66	9x3x¼		L
	C-900 (c. f.)																															
53	Cab		116	156	29000	▲6780	11.00/22D	12.00/22	Own●	8–3.8x3.7	332	7.5	306	190–3800	5	2.62x4.2	Y	Own	5	Own	SF	H	7.67–7.17	Own	O4IHV	542	829	TX	66	9x3x¼		L
	B-500 School Bus																															
54	Bus Chassis		154	154	13000	3940	7.00/22D	7.00/22	Own	6–3.62x3.6	223	7.8	202	133–4000	4	2.5x3.98		Own	4	Own	HF	H	6.20–6.80	Own	O4IHV	366	561	TX	128▼	9¼x2⅜x¼	C	
55	Bus Chassis		154	154	13000	4065	7.00/22D	7.00/22	Own	8–3.62x3.3	272	7.8	260	167–4400	5	2.5x3.57		Own	4	Own	HF	H	5.83–6.20	Own	O4IHV	366	561	TX	128▼	.....		.....

(Turn to Page 104, Please)

For Key to References and Abbreviations See Page 99

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CREZON FUSED PANELS . . . All purpose plywood

This Crezon faced exterior grade fir plywood is so extensive in application and size range that the Lumber Dealer can greatly reduce the number of items in his inventory by stocking it. CREZON PANELS replace various types of plywood, shelving stock, asbestos board, steel and aluminum siding, and numerous other materials. Available with either one or two side facing, it is economical and highly practical for almost every type of installation.

CREZON PANELS serve the Prefabricated Homes Builder perfectly as an exterior and interior plywood. Weatherproof and resistant to chemicals and fungus growth, the surface inhibits grain rise and holds paint for years without checking. In utility or rumpus rooms, garages, and other hard usage areas, CREZON PANELS present a durable, attractive surface even unpainted. Being made with waterproof glues and further protected by a plastic "skin", they are highly desirable in constructing kitchens, bathrooms and laundries.

The Mobile Homes Manufacturer can form CREZON FUSED PANELS to extreme radius on exterior and interior walls, and will find it an excellent material for cabinets, sink tops and other applications throughout the trailers. Cabinet and sliding doors work smoothly without sticking because warpage is minimized.

Commercial Truck and Trailer Manufacturers can rely on CREZON PANELS for the rugged strength and tough surface demanded of their materials. Severe tests have proven its qualities of extremely high resistance to abrasion, splitting, surface denting, and warping. CREZON FUSED PLYWOOD endures long after other materials have rusted out or otherwise deteriorated.

LUMBER DEALERS

PREFAB CONSTRUCTION

MOBILE HOMES BUILDERS

COMMERCIAL TRAILER MANUFACTURERS

THESE APPLICATIONS, TOGETHER WITH COUNTLESS OTHERS, MAKE **CREZON PANELS . . .**

THE UNIVERSAL TYPE PLYWOOD

STRENGTH—The CREZON PANEL's facing increases the already enormous strength of exterior grade plywood, making it somewhat stronger and more rigid. On some structures CREZON FUSED PLYWOOD siding has eliminated the need for bracing and sheathing, resulting in considerable savings on man hours and material.

DIMENSIONAL STABILITY—CREZON PANELS are unaffected by extremes of temperature and humidity, thus reducing grain rise and warpage to a minimum.

FLEXIBILITY—CREZON FUSED PLYWOOD (in the thin panels) may be curved to extreme radius without rupture or disfigurement to the face, and nailed, stapled, or glued to a framework for unusual designs in modern architecture.

PERFECT PAINT SURFACE—CREZON PANELS, when painted, show none of the defects that normally present a problem, and will present a marvelous surface for years and years.

COMPLETE SIZE RANGE—CREZON FUSED PLYWOOD PANELS are standard in thicknesses of ¼", 5/16", ⅜", ½", ⅝" and ¾" with one piece panels to 48"x120". Other thicknesses are available, and larger sizes may be had by scarfing.

SIMPLIFIES WOODWORKING—The CREZON overlay keeps the wood fiber firm and tight for sawing, planing, grooving, routing, etc., without danger of splitting out or splintering, whether the cut is with or against the grain.

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(Continued from Page 102)

Line Number	MAKE AND MODEL	Chassis List Price	WHEELBASE Minimum Standard	WHEELBASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Dual unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Speeds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operation	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	Ford —Cont'd																														
	B-600 School Bus																														
1	Bus Chassis		192	220	17000	4530	8.00/22D	9.00/22	Own	6-3.62x3.6	223	7.8	202	133-4000	4-2.5x3.98		Own	4	Own	HF	H	6.80–7.20	Own	O4IHV	366	561		TX	166[A]	9⅞x2⅜x⅞	C
2	Bus Chassis		192	220	17000	4630	8.00/22D	9.00/22	Own[■]	8-3.62x3.3	272	7.8	260	167-4400	5-2.5x3.57		Own	4	Own	HF	H	6.20–6.80	Own	O4IHV	366	561		TX	166[A]	9⅞x2⅜x⅞	C
	B-700 School Bus																														
3	Bus Chassis		245	245	21000	5600	8.00/22D	10.00/22	Own[♦]	8-3.62x3.3	272	7.6	247	158-3800	5-2.5x3.57	Y	Own	4	Own	HF	H	** –7.17	Own	O4IHV	444	697		TX	217	9x3x¼	L
	B-750 School Bus																														
4	Bus Chassis		245	245	21000	5905	9.00/22D	10.00/22	Own	8-3.62x3.7	302	7.5	279	175-3800	5 2.62x4 2	Y	Own	4	Own	HF	H	** –7 17	Own	O4IHV	444	697		TX	217[▼]	9x3x¼	L
	P-350 Par. Del.																														
5	W/S		104	122	8000	2970	7.00/18D	8.00/20	Own	6-3.62x3.6	223	7.8	202	133-4000	4-2.5x3.98		Own	3	Own	HF	H	4.88–5.88	Own	O4IHV	198	305		TX	88[#]	6x2¼x⅛	C
	P-500 Par. Del.																														
6	W/S		130	130	15000	3940	8.00/20S	8.00/20	Own	6-3.62x3.6	223	7.8	202	133-4000	4-2 5x3.98		Own	3	Own	HF	H	6 20–6 80	Own	O4IHV	322	355		TX	114[▼]	9¼x2⅛x¼	C
7	Kenworth(D) ♦521		153½	255	33000	12000	10.00/20	11.00/22	Cum NHB-600	6-5½x6	743	16	535	200–2100	7-4½x13⅛	Y	BL 8241	12	Tim R200P	H2F	H	5.91–9 76	Tim Fe900TW	BW4IA	724	1081a		TD	67¾	9½x3½x⅛	C
8	♦585		153½	255	33000	10700	10.00/20	11.00/22	HS 590-GV-3	6-5x5	590·6	6	490	232–2800	7-3¼x12⅛	Y	Fu 5-C720	15	Tim R200P	H2F	H	5.91–9 76	Tim Fe900TW	BW4IA	724	1081a		TD	67¾	9½x3¼x⅛	C
9	(D) *801		158		73400	37400	†	†	Cu NHB1D-600	6-5½x6	743	16	535	200–2100	7-4½x13⅛	Y	Fu 10F1220[▲]	10	Own	H2F	R	** –9 2	Tim Fu900W	BW4IA	1298	1870	C	FD	. . . .	. . . . .	C
10	(D) *802		168		94000	45000	. . . . .	††	**	6-5½x6	743	12	800	300–2100	7-4½x13⅛		††[▲]		Own	H2F	R	** –9 2	Tim Fu900W	BW4IA	1298	1870	C	FD	. . . .	. . . . .	C
11	(D) *802-A		168		94000	45000	. . . . .	††	**	6-5½x6	743	12	800	300–2100	7-4½x13⅛		Fu 10F1220	10	Own	H2F	R	** –9 2	Tim Fu900W	BW4IA	1298	1870	C	FD	. . . .	. . . . .	C
12	Peterbilt (D) 280		175	Opt	27000	12500	10.00/20D	11.00/22	Cum NHB600	6-5¼x6	743	17	500	200–2100	7-4½x16½	Y	Spi 8041	12	TimR-230DPA	2F	R	5.91–6 51	TimFe900DPA	BW4IA	738	1052		TD	86½	10¾x3½x⅞	CT
13	280 (coe)		114	Opt	27000	. . . . .	10.00/20	11.00/22	Cum NHB600	6-5¼x6	743	17	500	200–2100	7-4½x16½	Y	Spi 8041	12	TimR-230DPA	2F	R	5.91–6 51	TimFe900DPA	BW4IA	738	1052		TD	69½	10⅜x3⅜x⅞	CT
14	281		165	Opt	27000	10450	10.00/20	11.00/22	Cum NHB600	6-5¼x6	743	17	500	200–2100	7-4½x16½	Y	Spi 8045	12	Tim R-230P	2F	R	5.91–6 51	Tim FE900N	BW4IA	738	1052		TD	86½	10⅜x3⅜x⅞	CT
15	Reo F-20-1		125	185	16000	4675	7.50/20	8.25/20	Own 255[▼]	6-3⅝x4⅛	255	6.7	189	107–3400	7-2⅛x9 408	Y	WG-T98A	4	Tim E-100♦	HF	H	6 2 –6 8	Tim 30000	LT4IVH	382	552	var	TX	60⅝	8¼x2⅛x⅞	T
16	F-20-2		125	185	17000	4675	7.50/20	8.25/20	Own 255[♦]	6-3⅝x4⅛	255·6	7	189	107–3400	7-2⅛x9 408	Y	WG-T98A	4	Tim E-100♦	HF	H	6 2 –6 8	Tim 30000	LT4IVH	382	552	var	TX	60⅝	8¼x2⅛x⅞	T
17	F-20-3		125	185	18000	4905	7.50/20	9.00/20	Own 255[♦]	6-3⅝x4⅛	255·6	7	189	107–3400	7-2⅛x9 408	Y	WG-T98A	4	Tim E-100♦	HF	H	6 2 –6 8	Tim 31104	LT4IVH	388	602	var	TX	60⅝	9x3x¼	T
18	F-20T		125	125	16000	5025	7.50/20	7.50/20	Own 255[♦]	6-3⅝x4⅛	255·6	7	189	107–3400	7-2⅛x9 408	Y	WG-T98A	4	Tim E-300	HFd	H	6 13–8 10	Tim 30000	LT4IVH	382	552	var	TX	60⅝	8¼x2⅛x⅞	T
19	F-22-1		130	185	20000	5745	9.00/20	10.00/20	Own 292[♦]	6-3⅞x4⅛	292·6	5.2	224	124–3300	7-2½x9 408	Y	Cla 205V	5	Tim H-100[△]	HF	H	6 16–6 8	Tim 31104	LT4IVH	406	640	var	TX	65⅝	9x3x¼	T
20	F-22-2		130	185	21000	5745	9.00/20	10.00/20	Own 292[♦]	6-3⅞x4⅛	292·6	5.2	224	124–3300	7-2½x9 408	Y	Cla 205V	5	Tim H-100[△]	HF	H	6 16–6 8	Tim 31104	LT4IVH	406	640	var	TX	65⅝	9x3x¼	T
21	F-22-3		130	185	21000	5780	9.00/20	10.00/20	Own 292[♦]	6-3⅞x4⅛	292·6	5.2	224	124–3300	7-2½x9 408	Y	Cla 205V	5	Tim H-100[△]	HF	H	6 16–6 8	Tim 31104	LT4IVH	410	644	var	TX	65⅝	9x3x¼	T
22	F-22T		130	130	20000	6110	9.00/20	10.00/20	Own 292[♦]	6-3⅞x4⅛	292·6	5.2	224	124–3300	7-2½x9 408	Y	Cla 205V	5	Tim H-300[△]	HFd	H	6 67–8 85	Tim 31104	LT4IVH	406	640	var	TX	65⅝	9x3x¼	T
23	F-22R-1		130	185	22000	6230	10.00/20	10.00/22	Own 331[♦‡]	6-4¼x4½	331·6	4.2	264	140–3200	7-2½x9 408	Y	Cla 205V	5	Tim L-100[△]	HF	H	6 16–7.2	Tim 32500	LT4IVH	480	748	var	TX	65⅝	9x3x¼	T
24	F-22R-2		130	185	24000	6230	10.00/20	10.00/22	Own 331[♦‡]	6-4¼x4½	331·6	4.2	264	140–3200	7-2½x9 408	Y	Cla 205V	5	Tim L-100[△]	HF	H	6 16–7.2	Tim 32500	LT4IVH	480	748	var	TX	65⅝	9x3x¼	T
25	F-22R-3		130	185	24000	6500	10.00/20	10.00/22	Own 331[♦‡]	6-4¼x4½	331·6	4.2	264	140–3200	7-2½x9 408	Y	Cla 205V	5	Tim L-100[△]	HF	H	6 16–7.2	Tim FD900	LT4IVH	588	876	var	TX	65⅝	9x3x¼	T
26	F-22RT		130	130	22000	6705	10.00/20	10.00/22	Own 331[♦‡]	6-4¼x4½	331·6	4.2	264	140–3200	7-2½x9 408	Y	Cla 205V	5	Tim L-300[△]	HFd	H	6 36–8 28	Tim 32500	LT4IVH	480	748	var	TX	65⅝	9x3x¼	T
27	F-50-1		130	185	28000	7090	10.00/20	11.00/20	Own 160[■]	6-4¼x4½	331·6	7	290	160–3200	7-2¾x9⅛	Y	Spi 3152	5	Tim Q-100	HF	H	6 16–6 83	Tim FD-900	TWs4IA	610	1083	var	TX	65⅝	9½x3⅛x⅛	T
28	F-50-2		130	185	30000	7090	10.00/20	11.00/20	Own 160[■]	6-4¼x4½	331·6	7	290	160–3200	7-2¾x9⅛	Y	Spi 3152	5	Tim Q-100	HF	H	6 16–6 83	Tim FD-900	TWs4IA	610	1083	var	TX	65⅝	8½x3⅛x⅛	T
29	F-50-3		130	185	30000	7160	10.00/20	11.00/20	Own 160[■]	6-4¼x4½	331·6	7	290	160–3200	7-2¾x9⅛	Y	Spi 3152	5	Tim Q-100	HF	H	6 16–6 83	Tim FE-900	TWs4IA	610	1083	var	TX	65⅝	9½x3⅛x⅛	T
30	F-50-T		130	130	28000	7450	10.00/20	11.00/20	Own 160[■]	6-4¼x4½	331·6	7	290	160–3200	7-2¾x9⅛	Y	Spi 3152	5	Tim QT-300	HFd	H	6 36–8.51	Tim FD-900	TWs4IA	610	1083	var	TX	65⅝	9½x3⅛x⅛	T
31	A-600		139	187	28000	8155	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim Q-100[▲]	HF	H	6 16–6.83	Tim FD-900	TWs4IA	672	1083	var	TD	72	9½x3⅛x⅛	C
32	A-601		139	187	30000	8155	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim Q-100[▲]	HF	H	6 16–6.83	Tim FD-900	TWs4IA	672	1083	var	TD	72	9½x3⅛x⅛	C
33	A-602		139	187	30000	8170	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim Q-100[▲]	HF	H	6 16–6.83	Tim FE-900	TWs4IA	672	1083	var	TD	72	9½x3⅛x⅛	C
34	A-603		133	151	28000	8620	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim QT-300	HFd	H	6 63–8.51	Tim FD-900	TWs4IA	672	1083	var	TD	66	9½x3⅛x⅛	C
35	A-607		151	187	26000	7680	9.00/20	10.00/20	Own OV-200[△]	8-3⅞x4⅛	390·7	3.345	200–3400	5-3x5 7		Y	Spi 6352	5	Tim L-100[▲]	HF	H	6 16–7.2	Tim FD-900	LT4IVH	588	876	var	TD	84	9½x3⅛x⅛	C
36	A-700		139	187	30000	8255	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim R-100[▲]	HF	H	6 16–7.4	Tim FD-900	TWs4IA	672	1083	var	TD	72	9½x3⅛x⅛	C
37	A-701		139	187	32000	8255	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim R-100[▲]	HF	H	6 16–7.4	Tim FD-900	TWs4IA	672	1083	var	TD	72	9½x3⅛x⅛	C
38	A-702		139	187	32000	8270	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim R-100[▲]	HF	H	6 16–7.4	Tim FE-900	TWs4IA	672	1083	var	TD	72	9½x3⅛x⅛	C
39	A-703		133	151	30000	8880	10.00/20	11.00/22	Own OV-195[▼]	8-3⅞x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim R-300	HFd	H	6 99–8.38	Tim FD-900	TWs4IA	672	1083	var	TD	66	9½x3⅛x⅛	C
40	F-50D-1		130	185	28000	8310	10.00/20	11.00/22	Cum JT-G-B	6-4¼x5	401	16.4	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim Q100[▲]	HF	H	5.28–6.83	Tim FD-900	TWs4IA	610	1083	var	TD	65⅝	9½x3⅛x⅛	C
41	F-50D-2Q		130	185	30000	8310	10.00/20	11.00/22	Cum JT-G-B	6-4¼x5	401	16.4	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim Q100[▲]	HF	H	5.28–6.83	Tim FD-900	TWs4IA	610	1083	var	TD	65⅝	9½x3⅛x⅛	C
42	F-50D-2R		130	185	32000	8445	10.00/20	11.00/22	Cum JT-G-B	6-4¼x5	401	16.4	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim R100[▲]	HF	H	5.28–6.83	Tim FD-900	TWs4IA	672	1083	var	TD	65⅝	9½x3⅛x⅛	C
43	F-50D-3		130	185	30000	8380	10.00/20	11.00/22	Cum JT-6-B	6-4¼x5	401	16.4	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim Q100[▲]	HF	H	5.28–6.83	Tim FE-900	TWs4IA	610	1083	var	TD	65⅝	9½x3⅛x⅛	T
44	F-50D-T		130	130	28000	8610	10.00/20	11.00/22	Cum JT-6-B	6-4¼x5	401	16.4	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim QT300	HFd	H	5.62–7.69	Tim FD-900	TWs4IA	610	1083	var	TD	65⅝	9½x3⅛x⅛	C
45	F-506D		155	203	42000	11215	9.00/20	10.00/20	Cum JT-6-B	6-4¼x5	401	16	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim SLD	F2	T	7.67–9.33	Tim FD-900	TWs6IA	862	1394	var	TD	90⅝	9½x3⅛x⅛	C
46	F-536D		155	200	48000	13000	10.00/20	11.00/22	Cum JT-6-B	6-4¼x5	401	16	412	175–2500	7-3⅞x7.8	Y	Spi 6352	5	Tim SQD	F2	T	7.54–9.21	Tim FE-900	TWs6IA	862	1394	var	TD	90⅝	9½x3⅛x⅛	C
47	AC-603		108	154	28000	. . . . .	10.00/20	11.00/22	Own OV195[▼]	8-3⅝x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim QT300	HFd	H	6.63–8.51	Tim FD-900	TW s6IA	672	1083	var	TD	74	9½x3⅛x⅛	C
48	AC-703		108	154	30000	. . . . .	10.00/20	11.00/22	Own OV195[▼]	8-3⅝x4⅛	390·7	3.345	195–3200	5-3x5 7		Y	Spi 6352	5	Tim R300	HFd	H	6.42–8.00	Tim FD-900	TW s6IA	672	1083	var	TD	74	9½x3⅛x⅛	C
49	F-120L		187	187	18000	. . . . .	7.50/20	9.00/20	Own 255	6-3⅝x4⅛	255·6	7	189	107–3400	7-2.5x9.408	Y	WG T-98A	4	Tim E-100♦	HF	H	6.8–7.2	Tim 31104	LT4IVH	476	602	var	TX	160⅜	9½x3⅛x⅛	C
50	F-120G		219	219	18500	. . . . .	8.25/20	9.00/20	Own 255	6-3⅝x4⅛	255·6	7	189	107–3400	7-2.5x9.408	Y	WG T-98A	4	Tim E-100♦	HF	H	6.8–7.2	Tim 32500	LT4IVH	480	606	var	TX	192⅜	9½x3⅛x⅛	C
51	F-120H		238	238	18500	. . . . .	8.25/20	9.00/20	Own 255	6-3⅝x4⅛	255·6	7	189	107–3400	7-2.5x9.408	Y	WG T-98A	4	Tim E-100♦	HF	H	6.8–7.2	Tim 32500	LT4IVH	480	606	var	TX	211⅜	9½x3⅛x⅛	C
52	F-122H		238	238	21000	. . . . .	8.25/20	10.00/20	Own 292	6-3⅞x4⅛	292·6	5.2	224	124–3300	7-2.5x9.408	Y	Cla 205	4	Tim H-100♦	HF	H	6.8–7.2	Tim 32500	LT4IVH	480	644	var	TX	211⅜	9½x3⅛x⅛	C
53	F-122J		256	256	21000	. . . . .	8.25/20	10.00/20	Own 292	6-3⅞x4⅛	292·6	5.2	224	124–3300	7-2.5x9.408	Y	Cla 205	4	Tim H-100♦	HF	H	6.8–7.2	Tim 32500	LT4IVH	480	644	var	TX	229⅝	9½x3⅛x⅛	C
54	Studebaker 2E5		112	122	4800	2070	6.00/168	6.50/168	Own 1E	6-3x4¾	186	7.5	152	92–3800	4-3⅛x4⅜		Own	3	Own	H½	H	4.27–4.89	Own	B4IH	178	276	Co	2I	40	7⅞x2⅛x⅞	T
55	2E6		112	122	5000	2290	6.00/168	6.50/168	Own 4E	6-3⅞x4¾	246·7	5.2	204	106–3400	4-2⅛x5		Own	3	Own	H½	H	4.09–4 27	Own	B4IH	178	276	Co	2I	40	7⅞x2⅛x⅞	T
56	2E7		112	122	5000	2380	6.00/168	6.50/168	Own 2E	8-3⅞x2⅜	224·7	5.2	202	140–4500	5-2⅛x5⅜		Own	3	Own	H½	H	4.09–4 27	Own	B4IH	178	276	Co	2I	40	7⅞x2⅛x⅞	T
57	2E10		122	122	6700	2315	7.00/168	7.50/178	Own 1E	6-3x4⅜	186	7.5	152	92–3800	4-3⅛x4⅜		Own	3	Own	HF	H	** –4 88	Own	WE4IH	198	314	Co	2I	50	7⅞x2⅜x⅞	T
58	2E11		122	122	7000	2535	7.00/168	7.50/178	Own 4E	6-3⅞x4⅜	246·7	5.2	204	106–3400	4-2⅛x5		Own	3	Own	HF	H	4.10–4 88	Own	WE4IH	198	314	Co	2I	50	7⅞x2⅜x⅞	T
59	2E12		122	122	7000	2625	7.00/168	7.50/178	Own 2E	8-3⅞x2⅜	224·7	5.2	202	140–4500	5-2⅛x5⅜		Own	3	Own	HF	H	4.10–4 88	Own	WE4IH	198	314	Co	2I	50	7⅞x2⅜x⅞	T
60	2E13		131	131	9600	3140	7.00/178	7.50/16	Own 3E	8-3⅞x3⅛	259·7	5.2	236	156–4500	5-2½x5¼		Own	4	Own	HF	H	** –5 14	Own	WE4IH	231	355	*	TX	60⅛	8⅝x2¾x⅞	T
61	2E14		131	131	9600	3050	7.00/178	7.50 16	Own 4E	6-3⅞x4⅜	246·7	5.2	204	106–3400	4-2⅛x5		Own	4	Own●	HF	H	5.14–5 83	Own	WE4IH	231	355	*	TX	60⅛	8⅝x2¾x⅞	T
62	2E28		131	155	14000	3800	7.50/17	7.50/20	Own 3E	8-3⅞x3⅛	259·7	5.2	236	156–4500	5-2½x5¼		Own	4	Own●	SF	H	5.14–5 83	Own	WE4IH	294	442	Ce	TX	60⅛	8⅝x2¾x⅞	T
63	2E28B		131	155	15000	3840	7.50/17	8.25/20	Own 3E	8-3⅞x3⅛	259·7	5.2	236	156–4500	5-2½x5¼		Own	4	Own●	SF	H	5.14–5 83	Own	WE4IH	294	442	Ce	TX	60⅛	8⅝x2¾x⅞	T
64	2E38		131	171	16000	4410	7.50/20[▽]	9.00/20	Own 5E	8-3⅞x3⅛	259·7	5.2	236	156–4500	5-2½x5¼		Own	4	Own●	HF	H	** –6 80	Own	WE4IH	368	553	Ce	TX	60¼	8⅝x2½x⅞	T
65	2E38B		131	212	18000	4410	7.50/20[▽]	9.00/20	Own 5E	8-3⅞x3⅛	259·7	5.2	236	156–4500	5-2½x5¼		Own	4	Own●	HF	H	** –6 80	Own	WE4IH	368	553	Ce	TX	60¼	8⅝x2½x⅞	T
66	Ward La Fr. D-1		149	220	25000	▲9500	10.00/20	11.00/20	Con T6427	6-4⅞x4⅞	427·5	13	310	152–2600	7-2⅞x13⅛	Y	Ful 5A430	5	Tim Q-100	B	R	** –6 83	Tim FD900	BW4A	600	928	C	TM	68¼	9⅝x3x⅛	T
67	D-1C		149	220	29000	▲9500	11.00/20	11.00/22	Con T6427	6-4⅞x4⅞	427·5	13	340	152–2600	7-2⅞x13⅛	Y	Ful 5A430	5	Tim U-200	S2	R	** –7.08	Tim FD900	BW4A	673	1031	C	TM	68¼	9⅝x3x⅛	T
68	D-3		149	220	29000	▲10000	11.00/20	11.00/22	Con R6572	6-4⅝x5⅜	572·5	9	440	189–2600	7-3¼x14½	Y	Ful 5C650	5	Tim R-200	S2	R	** –7.84	Tim FD900	BW4B	673	1031	C	TM	68¼	10x3½x⅞	T
69	D-3S		149	220	29000	▲10000	11.00/20	11.00/22	Con R6602	6-4⅝x5⅜	602·5	9	463	198–2600	7-3¼x14½	Y	Ful 5C650	5	Tim R-200	S2	R	** –7.84	Tim FD900	BW4B	673	1031	C	TM	68¼	10x3½x⅞	T
70	(D) D-5		149	220	35000	▲12500	11.00/22	11.00/22	Cum HB600	6-4⅞x6	672	17	500	150–1800	7-4½x16¼	Y	Ful 5C650	5	Tim R-200	S2	R	** –6.42	Tim 27463	BW4B	681	1041	C	TM	68¼	10x3½x⅞	T
	White-Freightliner																														
71	(c.o.e.) WF-42		115	120	. . . . .	10600	10.00/20	. . . . .	Cum NHB	6-5¼x6	743	13	575	200–2100	7-4½x16½	Y	Spi 8041	8	Tim R-330	SFd	H	4.77–6.38	Tim FE900	O4rIA	645	1050	a	TD	73	8¼x3½x⅜	D

(Turn to Page 106, Please)

For Key to References and Abbreviations See Page 99

Among the
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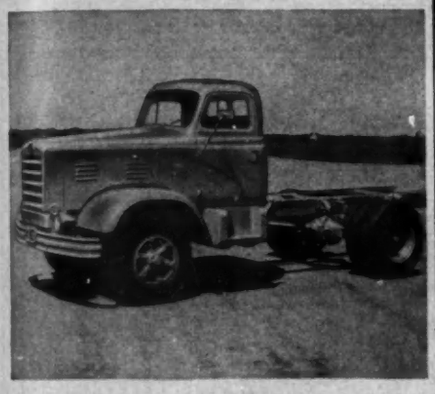
engines;
equipped
carburetor
adopted by

HOLLEY

HOLLEY Carburetor Co.

NEWS for Fleet Operators

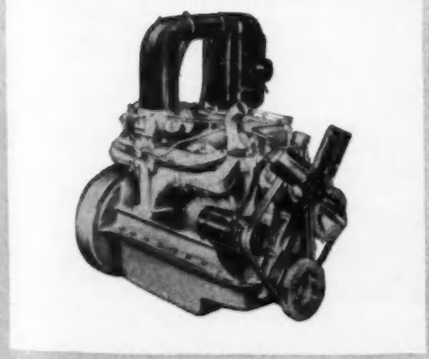
HOLLEY CARBURETOR COMPANY • VAN DYKE, MICHIGAN



Among the Four Wheel Drive truck models with new power plants is this 1955 model No. 222.

Four Wheel Drive Models Offer New Power Plants

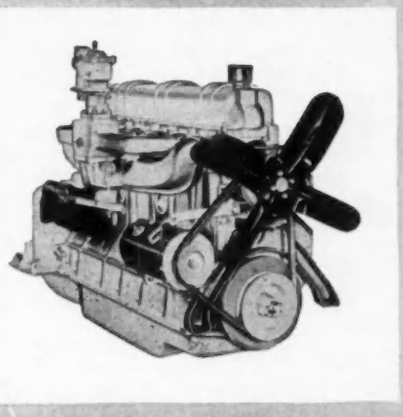
Seven new truck engines are now being used by The Four Wheel Drive Auto Company to power their line of heavy duty trucks. Horsepower ratings range from 131 hp on the 240 all the way up to 201 hp. Holley carburetors are standard equipment on each of these models. Holley's famous 1904 glass bowl carburetor is used on both the 6 cyl. 240 and 282 engines; Holley carburetors with integral governors are original equipment on five of the seven engines; and the powerful 501 engine is equipped with the Holley 4-barrel truck carburetor—the first of its kind to be adopted by the industry!



Among the new engines now being used by Four Wheel Drive is this powerful new RD-501.

International Announces New Holley-Equipped Engine

International Harvester's new Black Diamond 264 engine develops 140 brake horsepower at 3800 rpm. Equipped with the famous Holley 1901FF carburetor, the new 6 cylinder valve-in-head engine has 264 cubic inches displacement, 3-11/16" bore and 4-1/8" stroke. The Holley 1901FF carburetor used in this engine is the famous "true concentric" with all important metering parts located at the center line of the fuel bowl.



International Harvester's new 264 Black Diamond engine develops 140 brake horsepower at 3800 rpm.

NEW HALL-SCOTT ENGINE FEATURES 4-BARREL HOLLEY CARBURETOR

This heavy duty truck is powered by the Hall-Scott model 590 engine. The famous Holley 4-barrel carburetor, the first to be used by the truck industry, is original equipment on this engine.

Hall-Scott's new 590 engine weighs less than 1300 pounds and delivers more than 200 horsepower. Its compact design develops in excess of one horsepower per six pounds of engine weight in an over-all length of only 49-1/4". The model 590-GV3 is equipped with Holley's famous 4-barrel truck carburetor—Model 2140G. This Holley model is equipped with an integral vacuum type governor. The bare engine horsepower of the 590-GV3 is 232 at 2800 rpm. The maximum torque is 490 at 1600 rpm.

Holley Carburetor Company
11955 E. Nine Mile Road
Van Dyke, Michigan

FOR MORE THAN HALF A CENTURY ORIGINAL EQUIPMENT MANUFACTURERS FOR THE AUTOMOTIVE INDUSTRY

T-4

(Continued from Page 104)

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minumum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Speeds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operation	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	Four-Wheel-Drive																														
1	Biederman . . PM62		162	162	40000	15040	10.00/20D	11.00/20	Cum NHB600	6-5½x6	743	16	535	200-2100	7-4½x13½	Y	Fu R950C	10	Tim SW3458P	WF	L	** -6.17	Tim FE900	BW6IA	1082	1569	G	TD	62	10x3x⅜	B
2	Coleman G-55		150	160	34000	12000	11.00/20	12.00/20	Buda LO-525	6-4½x5½	525	6.7	400	150-2200	7-3x7¼	Y	Fu 5A650	5	OW-289-CM	2		7.17-9.72	OW	TWIA	598	9214		FD	84	10x3x⅝	C
3	. . . . . G-55		150	160	34000	12000	11.00/20	12.00/20	Wau 140GZ	6-4⅝x5½	554	6.4	451	188-2600		Y	Fu 4A86	4	OW-289-CM	2		7.17-9.72	OW	TWIA	598	921		FD	84	10x3x⅝	C
4	(D) D-55		150	160	34000	13000	11.00/20*	12.00/20	Cum HB600	6-4¼x6	672	17	500	150-1800		Y	Fu 5A650■	5	OW-289-CM			7.17-9.72	OW	TWIA	598	921		FD	84	10x3x⅝	
5	Dodge . . . C-3-PW6		126	126	9500	3950	7.50/16S	9.00/16S	Own T-137	6-3¼x4½	230	7.3	191	103-3600	4-2½x4.8	Y	NP 88790	4	Own T-137	HyF	H	4.89-5.83	Own T-137	O4IH	210	a10	Co	TX	52½	½x2x6	C
6	Fabco (c) . . FD50A		114	123	5800	3600	6.00/16	6.50/16	Chevrolet	6-3x3½	236	7.5	200	112-3700	4-⅛	N	Chevrolet*	8	Chevrolet	H½	H	** -3.9	Own RC	O4IH	158	259	Co	21F	39	5¾	C
7	(c) FD50B			110	6000	3600	6.00/16	6.50/16	Ford	6-3 6x3.6	223	7.5	195	118-2800	4-2½x4		Ford*	8	Ford	H½	H	** -4.27	Own RF	O4IH	179	259		21M	41	5.9	C
8	(c) FD50B			110	6000	3600	6.00/16	6.50/16	Ford	8-3.5x3.1	239	7.5	215	122-4200	5-2½x3½		Ford*	8	Ford	H½	H	** -4.27	Own RF	O4IH	179	259		21M	41	5.9	C
9	(c) FD76A		123		8500	4000	6.00/15	7.50/17	Chevrolet	6-3x3½	236	7.5	200	112-3700	4-⅛	N	Chevrolet*	Hyf	H	** -4.57	Own RC	O4IH	186	302	Co	21F	48	5¾	C
10	(c) FD76B		118		8500	4000	6.50/16	7.50/17	Ford	6-3.6x3.6	223	7.5	195	118-3800	4-2½x4		Ford*	8	Ford	HF	H	** -4.88	Own RF	O4IH	196	302		TX	49	6	C
11	(c) FD75B		118		8500	4000	6.50/16	7.50/17	Ford	8-3.5x3.1	239	7.5	215	132-4200	5-2½x3½		Ford*	8	Ford	HF	H	** -4.88	Own RF	O4IH	196	302		TX	49	6	C
12	(c) FD101A		135		11400	4400	7.00/17	7.00/18	Chevrolet	6-3x3½	236	7.5	200	112-3700	4-⅛	N	Chevrolet*	Hyf	H	** -5.14	Own RC	O4IH	230	371	Co	21F	60	7	C
13	(c) FD101B		130		11400	4400	7.00/17	7.50/16D	Ford	6-3.6x3.6	223	7.5	195	118-3800	4-2½x4		Ford*	8	Ford	HF	H	** -5.83	Own RF	O4IH	231	355		TX	61	7	C
14	(c) FD101B		130		11400	4400	7.00/17	7.50/16D	Ford	8-3.5x3.1	239	7.5	215	132-4200	5-2½x3½		Ford*	8	Ford	HF	H	** -5.83	Own RF	O4IH	231	355		TX	61	7	C
15	(c) FD201A		130	172	19000	5700	7.50/20	9.00/20	Chevrolet	6-3¾x3½	261	7.2	220	135-4000	4-⅛	N	Chevrolet*	Hyf	H	** -6.17	Own RC	O4IH	375	597	Co	TX	60	9½	C
16	(c) FD201B		130	172	19000	5700	7.50/20	8.25/20	Ford	8-3.5x3.1	239	7.5	215	132-4200	5-2½x3½		Ford*	10	Ford	HF	H	** -6.8	Own RF	O4IHV	366	561		TX	61	9¼	C
17	(c) FD201B		130	172	19000	5700	7.50/20	8.25/20	Ford	8-3.6x3.1	256	7.5	228	140-3900	5-2½x3½	Y	Ford*	10	Ford	HF	H	** -6.8	Own RF	O4IHV	366	561		TX	61	9¼	C
18	(c) FD251B		130	172	27000	7500	8.25/20	9.00/20	Ford	8-3.8x3.5	317	7.2	286	170-3900	5-2⅝x4⅛	Y	Ford*	10	Ford	SF	H	7.17-7.67	Own RF	O4IHV	485	729		TX	61	9	L
19	Federal . . T400R-1		157	205	44000	12690	10.00/20	11.00/22	Con T6427	6-4⅛x4⅞	427	6.4	350	170-3000	7-2⅞x13½	Y	Cla 290V	5	Tim SQD	H2	L	5.78-9.21	Tim FE900	T4IA	1073	1550	a	D	84	10½x3½x⅛	P
20	. . . . . T500R-1		157	205	45000	14305	10.00/20	11.00/22	Con U6501	6-4½x5¼	501	6.1	413	182-2800	7-2¼x14½	Y	Fu 5A65	5	Tim SQD	H2	L	5.78-9.21	Tim FE900	T4IA	1073	1550	a	D	84	10½x3½x⅛	P
21	. . . . . T600R-1		157	216	60000	16975	11.00/22	12.00/24	Con R6602	6-4⅛x5⅛	602	6.2	480	212-2800	7-3¼x14½	Y	Fu 5A65	5	Tim SFD4600	H2	L	8.07x11.6	Tim 27461	T4IA	1308	1888	a	D	84	10½x3½x⅛	P
22	. . . . . T600R-4		157	216	60000	16585	11.00/22	12.00/24	Con R6602	6-4⅞x5⅜	602	6.2	480	212-2800	7-3¼x14⅛	Y	Fu 5A65	5	Tim SW456	W	L	4.71-8.2	Tim 27461	T4IA	1308	1888	a	D	84	10½x3½x⅛	P
23	FWD 140		142	Opt	14500	♦6250	7.50/20D	10.00/20S	Int SD240	6-3⅛x4⅛	240	7.0	208	131-3800	4-2¾x6⅛	N	WG T9	8	Own 13B	SF	H	** -6.17	Own 12B	T4IHV	286	442	a	T4	72¾	8x3x¼	TF
24	 171		154	Opt	17500	♦6900	8.25/20D	10.00/20S	Int BD282	6-3⅛x4½	282	6.5	251	137-3600	4-2⅛x4⅛	Y	Int F51C	5	Own 13C	SF	H	5.86-10.5	Own 12B	T4IHV	367	553	a	T4	72¾	8x3x¼	TF
25	 222		154	Opt	22000	♦7850	9.00/20D	10.00/20S	Int BD308	6-3⅛x4½	308	6	272	145-3600	4-2⅛x4⅛	Y	Int F51C	5	Own 23	SF	H	4.86-8.98	Own 22	Wg4IHV	419	706	a	T4	84¾	9x3x¼	TF
26	(D) 223D		154	Opt	22000	♦8685	9.00/20D	10.00/20S	GMC 371	3-4¼x5	213	16	300	100-2000	4-3½x4½	Y	Fu 5A430	5	Own 23	SF	H	4.86-8.98	Own 22	Wg4IHV	419	706	a	T4	84¾	9x3x¼	TF
27	 264		154	Opt	26000	♦8450	10.00/20D	10.00/20	Int RD372	6-4⅛x4⅛	372	6	309	165-3200	7-3¼x10½	Y	Fu 5A4s	5	Own 23	SF	H	4.86-8.98	Own 22	Wg4IHV	419	706	a	T4	84¾	9x3x¼	TF
28	(D) 264D		154	Opt	26000	♦9230	10.00/20D	10.00/20	GMC 471	4-4¼x5	284	16	385	150-2100	5-3½x5⅛	Y	Fu 5C650	5	Own 23	SF	H	4.86-8.98	Own 22	Wg4IHV	419	706	a	T4	84¾	9x3x¼	TF
29	. . . . . M264		161	Opt	26000	♦8500	10.00/20D	10.00/20	Int RD372	6-4⅛x4⅛	372	6.5	309	165-3200	7-3¼x10½	Y	Fu 5A43	5	Own 23	SF	H	4.86-8.98	Own 22	Wg4IHV	419	706	a	T4	91¾	9x3x¼	TF
30	(D) M264D		161	Opt	26000	♦9280	10.00/20D	10.00/20	GMC 471	4-4¼x5	284	16	385	150-2100	5-3½x5⅛	Y	Fu 5C650	5	Own 23	SF	H	4.86-8.98	Own 22	Wg4IHV	419	706	a	T4	91¾	9x3x¼	TF
31	 285		154	Opt	28000	▲10700	11.00/20D	13.00/20S	Int RD406	6-4⅝x4½	406	6.5	338	175-3200	7-3¼x10½	Y	Fu 5A62	5	Own 33A	SF	H	4.86-8.98	Own 32A	Wg4IHV	539	804	a	T4	84¾	9¼x3x⅜	TF
32	 326		154	Opt	32000	▲11715	11.00/20D	13.00/20S	Int RD450	6-4⅝x5	450	6.2	387	182 3900	7-3¼x10½	Y	Fu 5A62	5	Own 33A	SF	H	4.18-12.2	Own 32A	Wg4IHA	539	804	a	T4	84¾	10x3x½	C
33	(D) 324D		150	Opt	32000	▲12350	11.00/20D	13.00/20S	GMC 471	4-4¼x5	284	16	385	150-2100	5-3½x5⅝	Y	Own 35	5	Own 33	SF	H	4.85-14.1	Own 32	Wg4IHA	640	1105	a	T4	90	10x3x½	C
34	(D) 324D		154	Opt	32000	▲12495	11.00/20D	13.00/20S	GMC 471	4-4¼x5	284	16	385	150-2100	5-3½x5⅝	Y	Fu 5C650	5	Own 33A	SF	H	4.18-12.2	Own 32A	Wg4IHA	539	804	a	T4	84¾	10x3x½	C
35	(D) 327D		176	Opt	32000	▲13295	11.00/20D	13.00/20S	Cum HRB	6-5½x6	743	16	540	165-1800	7-4½x16	Y	Fu 5C720	5	Own 33A	SF	H	4.18-12.2	Own 32A	Wg4IHA	539	804	a	T4	106¾	10x3x½	C
36	 366		150	Opt	36000	▲12600	11.00/20D	13.00/20S	Wau 140GZB	6-4⅝x5½	554	6.4	460	188-2600	7-3¼x13	Y	Own 35	5	Own 33	SF	H	4.85-14.1	Own 32	Wg4IHA	640	1105	a	T4	90	10x3x½	C
37	 367		154	Opt	36000	▲12065	11.00/20D	13.00/20S	Int RD501	6-4½x5¼	501	6	444	212-3000	7-3¼x10½	Y	Fu 5C65	5	Own 33	SF	H	4.85-14.1	Own 32	Wg4IHA	640	1105	a	T4	84¾	10x3x½	C
38	(D) 368D		176	Opt	36000	▲13685	11.00/20D	13.00/20S	Cum HRBB	6-5½x6	743	16	505	180-2000	7-3¼x17¾	Y	Fu 5C720	5	Own 33	SF	H	4.85-14.1	Own 32	Wg4IHA	640	1105	a	T4	106¾	10x3x½	C
39	 408		154	Opt	40000	▲13900	12.00/20D	14.00/20S	Wau 145GK	6-5¼x6	779	6.2	595	216-2000	7-3½x17¾	Y	Ful 10A1120	10	Own 33	SF	H	5.71-8.53	Own 32	Wg4IHA	640	1105	a	T4	84¾	10x3x½	C
40	 409		154	Opt	40000	▲15000	12.00/20D	14.00/20S	Wau 145GKB	6-5¼x6	779	6.2	595	240-2400	7-3½x17¾	Y	Ful 10A1120	10	Own 33	SF	H	5.71-8.53	Own 32	Wg4IHA	640	1105	a	T4	84¾	10x3x½	C
41	(D) 406D		154	Opt	40000	▲14400	12.00/20D	14.00/20S	GMC 6-71	6-4¼x5	426	16	600	200-2000	7-3½x7⅞	Y	Ful 10A1120	10	Own 33	SF	H	5.71-8.53	Own 32	Wg4IHA	640	1105	a	T4	84¾	10x3x½	C
42	(D) 409D		154	Opt	40000	▲14570	12.00/20D	14.00/20S	Cum NHB	6-5½x6	743	. . .	535	200-2100	7-4½x . . .	Y	Ful 10A1120	10	Own 33	SF	H	5.71-8.53	Own 32	Wg4IHA	640	1105	a	T4	84¾	10x3x½	C
43	. . . . . M10G		150	180	44000	▲15800	12.00/20D	14.00/20S	Wau 145GK	6-5¼x6	779	6.2	540	186-2000	7-3½x17¾	Y	Own M	10	TW 79721	2F	H	6.7 -9.2	T WF409W	WW4IA	693	1144	a	T4	90	10x3x½	C
	Marmon-Herr.																														
44	. . . . . M104		110	118	5300	3800	6.50/16	7.10/15	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	4	Ford	H	H	** -4.27	Own	F4H	179	259	c	X	40½	5x2¼x⅜	C
45	. . . . . 6M104		110	118	5300	3800	6.50/16	7.10/15	Ford	6-3.62x3.6	223	7.8	202	133-4000	4-44.83	N	Ford	4	Ford	H	H	** -4.27	Own	F4H	179	259	a	X	40½	5x2¼x⅜	C
46	. . . . . M254		118		8000	4200	7.50/17	8.00/17	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	8	Ford	H	H	** -4.88	Own	F4H	182	283	a	PX	48½	6x2¼x⅜	C
47	. . . . . 6M254		118		8000	4200	7.50/17	8.00/17	Ford	6-3.62x3.6	223	7.8	202	133-4000	4-44.83	N	Ford	8	Ford	H	H	** -4.88	Own	F4H	182	283	a	PX	48½	6x2¼x⅜	C
48	. . . . . M354		130		8000	4300	7.00/18	8.00/17	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	8	Ford	H	H	** -5.83	Own	F4H	224	335	a	PX	60½	7x2¾x⅜	C
49	. . . . . 6M354		130		8000	4300	7.00/18	8.00/17	Ford	6-3.62x3.6	223	7.8	202	133-4000	4-44.83	N	Ford	8	Ford	H	H	** -5.83	Own	F4H	224	335	a	PX	60½	7x2¾x⅜	C
50	. . . . . M504		130	154	17500	5700	7.00/22	8.00/22	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	8	Ford	H	H	** -5.83	Own	F4H	352	553	a	PX	84½	9¼x2½x¼	C
51	. . . . . 6M504		130	154	17500	5700	7.00/22	8.00/22	Ford	6-3.62x3.6	223	7.8	202	133-4000	4-44.83	N	Ford	8	Ford	H	H	** -5.83	Own	F4H	352	553	a	PX	84½	9¼x2½x¼	C
52	. . . . . CM504		134	158	17500	5900	7.00/22	8.00/22	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	8	Ford	H	H	** -5.83	Own	F4H	352	553	a	PX	108	9¼x2½x¼	C
53	. . . . . M604		130	172	20000	5640	9.00/22	10.00/22	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	8	Ford	H	H	** -6.80	Own	F4HV	353	553	a	PX	84½	9¼x2½x¼	C
54	. . . . . CM604		134	158	20000	5850	9.00/22	10.00/22	Ford	8-3.62x3.3	272	7.8	260	167-4400	5-28.04	N	Ford	8	Ford	H	H	** -6.80	Own	F4HV	352	553	a	PX	108	9¼x2½x¼	C
55	. . . . . M704		132	192	22000	7000	9.00/22	10.00/22	Ford	8-3.62x3.3	272	7	259	168-3800	5-28.04	N	Ford	8	Ford	H	H	** -7.17	Own	F4HV	444	697	a	PX	84½	9x3x¼	L
56	. . . . . CM704		134	158	22000	7600	9.00/22	10.00/22	Ford	8-3.62x3.3	272	7	259	168-3800	5-28.04	N	Ford	8	Ford	H	H	** -7.17	Own	F4HV	444	697	a	PX	106	9x3x¼	L
57	. . . . . M754		132	192	24000	7400	9.00/22	10.00/22	Ford	8-3.62x3.7	302	7.5	286	186-3800	5-34.63	Y	Ford	10	Ford	H	H	** -7.17	Own	F4HV	444	697	a	PX	84½	9x3x¼	L
58	. . . . . CM754		132	156	24000	7600	9.00/22	10.00/22	Ford	8-3.62x3.7	302	7.5	286	186-3800	5-34.63	Y	Ford	10	Ford	H	H	** -7.17	Own	F4HV	444	697	a	PX	106	9x3x¼	L
59	. . . . . M804		132	192	26000	7600	10.00/22	11.00/22	Ford	8-3.8x3.66	332	7.5	306	190-3800	5-34.63	Y	Ford	10	Ford	SB	H	** -7.17	Own	F4HV	485	729	a	PX	84½	9x3x¼	L
60	. . . . . CM804		132	156	26000	7900	10.00/22	11.00/22	Ford	8-3.8x3.66	332	7.5	306	190-3800	5-34.63	Y	Ford	10	Ford	SB	H	** -7.17	Own	F4HV	485	729	a	PX	106	9x3x¼	L
61	. . . . . M904		132	192	29000	7800	11.00/22	11.00/24	Ford	8-3.8x3.66	332	7.5	316	200-3800	5-34.63	Y	Ford	10	Ford	SB	H	** -7.17	Own	F4HV	542	829	a	PX	84½	9x3x¼	L
62	. . . . . CM904		132	156	29000	7900	11.00/22	11.00/24	Ford	8-3.8x3.66	332	7.5	316	200-3800	5-34.63	Y	Ford	10	Ford	SB	H	** -7.17	Own	F4HV	542	829	a	PX	106	9x3x¼	L
63	. . . . . MH-610		159	193	24000	9547	10.00/20D	11.00/20	Her WXLC3	6-4¼x4¾	404	6	312	139-2600	7-2¾x3¼	Y	MH610	10	MH610A	HyF	H	** -6.80	MH610	4HV	361	583	c	F	84	12¼x3x⅜	CTF
64	. . . . . MH-615		159	193	26000	10158	10.00/20D	11.00/20	Her WXLC3	6-4¼x4¾	404	6	312	139-2600	7-2¾x3½	Y	MH615	10	MH615A	2S	H	** -8.43	MH615	BW4A	459	767	c	F	84	12¼x3x⅜	CTF
65	. . . . . MH-620		159	193	28000	10615	10.00/20D	11.00/20	Her RXLC	6-4⅝x5¼	529	6	408	146-2400	6-3½x3¼	Y	MH620	10	MH620A	2S	H	** -8.43	MH620	BW4A	459	767	c	F	84	12¼x3x⅜	CTF
66	. . . . . MH-625		159	193	30000	11511	11.00/20D	12.00/20	Her RXLC	6-4⅝x5¼	529	6	408	146-2400	7-3½x3¼	Y	MH625	10	MH625	2S	H	** -8.59	MH625	4HV	650	1056	c	F	84	12¼x3x⅜	CTF
67	. . . . . MH-630		159	193	33000	11711	11.00/20D	12.00/20	Her RXLDH	6-4¾x5¼	558	6	440	180-2600	7-3½x3¼	Y	MH630	10	MH630	2SF	H	** -8.59	MH630	BW4A	650	1056	c	F	84	12¼x3x⅜	CTF

(Turn to Page 108, Please)

For Key to References and Abbreviations See Page 99

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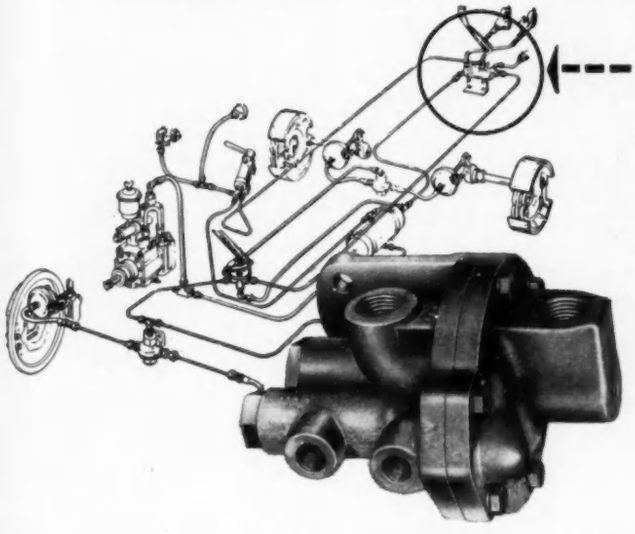
COMMERCIA

these Wagner Air Brake Protection Valves
work hand-in-hand to help you . . .

safeguard your tractor-trailer units



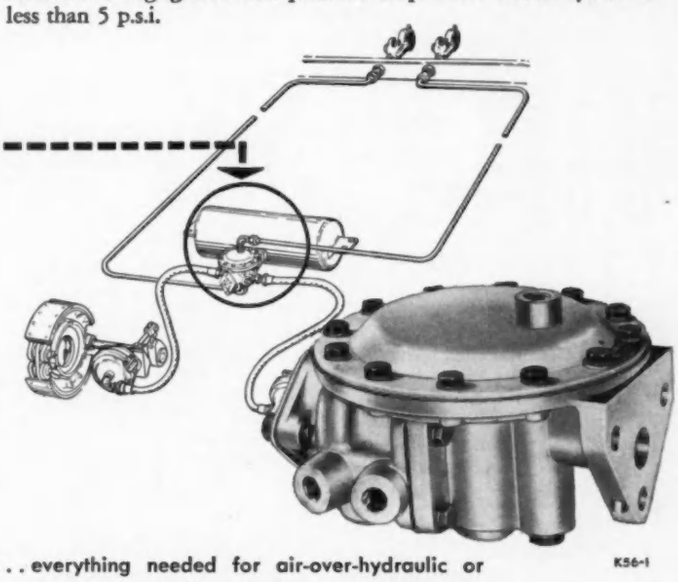
Protection for tractor. Wagner's Tractor Protection Valve does away with out-dated shut-off cocks that many times accidentally release tractor air pressure. Completely "foolproof." No preventive maintenance service is required because valve is completely and automatically tested each time hose line is coupled or uncoupled.

If the trailer is accidentally uncoupled, the tractor protection valve automatically seals the tractor brake system.

In the event of loss of reservoir pressure due to leakage in the trailer system, this automatic sealing action also preserves the brakes in the tractor.

If there's a sudden loss of air pressure due to breakaway, line failure, or normal uncoupling, the amount of air escaping from the tractor reservoir is negligible . . . air pressure drop in the tractor system is less than 5 p.s.i.

Protection for trailer



The Relay Quick-Release Emergency Valve is actually 3 valves in one.

1. As a relay unit, it controls braking applications in trailer . . . prevents ramming, binding or bumping.
2. Quick-release action speeds trailer brake release.
3. As an emergency unit, it automatically applies trailer brakes in case of trailer breakaway or an abnormal drop in trailer emergency line pressure.

Hose need not be disconnected when valve is serviced. For the complete story on these Wagner Air Brake Protection Valves, write for Bulletins KU-153 and KU-154.

K56-1

Wagner Air Brake Systems are complete . . . everything needed for air-over-hydraulic or straight-air systems. Line includes treadle, lever and push type application valves . . . hand valves, the Wagner power cluster, diaphragms and power cylinders and of course the famous Wagner Rotary Air Compressor. For complete information write today for Catalog KU-201A.

Wagner Electric Corporation 6470 PLYMOUTH AVENUE • ST. LOUIS 14, MO., U. S. A.

LOCKHEED HYDRAULIC BRAKE PARTS and FLUID • NoRoL • CoMoX BRAKE LINING • AIR BRAKES • AIR HORNS • TACHOGRAPHS • ELECTRIC MOTORS • TRANSFORMERS • INDUSTRIAL BRAKES

(Continued from Page 106)

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Speeds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operation	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	NAPCOPower-Pak																														
1	(C) 3653		125		6000	3300	6.00/15	7.50/17	C-Thrift-Mas	6-3 3/8 x3 1/2	236	7.5	200	112-3700	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -4.57	Own	C41HV	186	302	Co	21F	48 1/4	5 1/2 x2 1/4 x 1/4	C
2	(C) 4153		137		15700	4945	6.50/20D	7.50/20D	C-Load-Mas	6-3 3/8 x3 1/2	236	7.5	200	112-3700	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	60	8 3/4 x2 1/2 x1 1/4	C
3	(C) 4453		161		15700	5095	6.50/20D	7.50/20D	C-Load-Mas	6-3 3/8 x3 1/2	236	7.5	200	112-3700	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	84	8 3/4 x2 1/2 x1 1/4	C
4	(C) 6153		137		17700	5190	7.50/20D	8.25/20D	C-Job-Mas	6-3 3/4 x3 1/2	261	7.2	220	135-4000	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	60	8 3/4 x2 1/2 x1 1/4	C
5	(C) 6453		161		17700	5315	7.50/20D	8.25/20D	C-Job-Mas	6-3 3/4 x3 1/2	261	7.2	220	135-4000	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	84	8 3/4 x2 1/2 x1 1/4	C
6	(C) 6553		179		17700	5425	7.50/20D	8.25/20D	C-Job-Mas	6-3 3/4 x3 1/2	261	7.2	220	135-4000	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	102	8 3/4 x2 1/2 x1 1/4	C
7	(C) 5453		134		17700	5225	7.50/20D	8.25/20D	C-Job-Mas	6-3 3/4 x3 1/2	261	7.2	220	135-4000	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	84 1/8	8 3/4 x2 1/2 x1 1/4	C
8	(C) 5753		158		17700	5350	7.50/20D	8.25/20D	C-Job-Mas	6-3 3/4 x3 1/2	261	7.2	220	135-4000	4- ‡‡	N	Chev.	8	Chev.	HyF	H	** -6.17	Own	C21HV	350	579	ac	TIX	108 1/8	8 3/4 x2 1/2 x1 1/4	C
9	Oshkosh W-214		150	205	22000	9025	9.00/20D	9.00/20	Con B6427	6-4 1/8 x4 7/8	427		328	137-2600	7-2 7/8x13 1/2	Y	Own W-214	5	Own W-214	HF	H	** -6.2	Own W-214	T41HDV	630	685	Co	TX	82	8 1/4 x3x3 3/4	TF
10	W-214-D		150	205	22000	9300	9.00 20	9.00/20	Con T6427	6-4 1/8 x4 7/8	427		308	124-2400	7-2 7/8x13 1/2	Y	Own W-214	5	Own W-214	HF	H	** -6.2	Own W-214	T41HDV	630	685	Co	TX	82	8 1/4 x3x3 3/4	TF
11	W-314		150	205	25000 ▲	9650	10.00/20D	10.00/20	Con B6427	6-4 1/8 x4 7/8	427		328	137-2600	7-2 7/8x13 1/2	Y	Own W-314	5	Own W314	HF	H	** -6.2	Own W314	T41HDV	537	825	Co	TX	82	8 1/4 x3x3 3/4	TF
12	W-314-D		150	205	25000	9700	10.00/20	10.00/20	Con T6427	6-4 1/8 x4 7/8	427		308	124-2400	7-2 7/8x13 1/2	Y	Own W-314	5	Own W-314	HF	H	** -6.2	Own W-314	T41HDV	537	825	Co	TX	82	8 1/4 x3x3 3/4	TF
13	W-414		150	205	28000 ▲	10150	10.00/20D	10.00/20	Con T6427	6-4 1/8 x4 7/8	427		342	157-2600	7-2 7/8x13 1/2	Y	Own W-414	5	Own W414	HF	H	** -6.2	Own W414	T41HDV	618	876		PX	82	8 1/4 x3x3 3/4	TF
14	W-1700		150	205	30000 ▲	11200	11.00/20D	12.00/20S	Her RXC	6-4 5/8 x5 1/4	529		410	145-2200	7-3x13 3/4	Y	Own W-1700	5	Own W1700	SF	H	** -6.4	Own 1700	T41HDV	570	980	G	PX	82	8 1/4 x3x3 3/4	TF
15	W-1700-15-C		160		32000	12300	11.00/20D	12.00/20	Con R6513	6-4 1/2 x5 3/4	513		427	190-2600	7-3 1/4 x4 1/2	Y	O. W1700-15	10	Own W1700-15	SF	H	** -7.15	Own W1700-15	T41HDV	570	980	G	PX	92 3/8	10 1/8 x3x3 3/4	TF
16	W-1700-15-CR		160		32000	12300	11.00/20D	12.00/20	Con R-6513	6-4 1/2 x5 3/4	513		427	190-2600	7-3 1/4 x4 1/2	Y	O. W1700-15	10	Own W1700-15	SF	H	** -7.27	Own W1700-15	T41HDV	570	980	G	PX	92 3/8	10 1/8 x3x3 3/4	TF
17	W-614		150	205	32000	12200	11.00/20D	12.00/20	Con R6513	6-4 1/2 x5 3/4	513		427	190-2600	7-3 1/4 x4 1/2	Y	Own W-614	5	Own W-614	SF	H	** -7.1	Own W-614	T41HDp	570	980	G	PX	82	10 1/8 x3x3 3/4	TF
18	W-814		150	205	36000	12600	11.00/20D	12.00/20	Con R6572	6-4 3/4 x5 3/4	572		464	210-2600	7-3 1/4 x14 1/2	Y	Own W-814	5	Own W-814	SF	H	** -7.1	Own W-814	4IHDp	606	1024	G	PX	82	10 1/8 x3x3 3/4	TF
19	W-815		150	205	36000	12600	11.00/20D	12.00/20	Con R6602	6-4 7/8 x5 3/4	602		484	218-2600	7-3 1/4 x14 1/2	Y	Own W-815	5	Own W-815	SF	H	** -7.1	Own W-815	4IHDp	606	1024	G	PX	82	10 1/8 x3x3 3/4	TF
20	W-824		150	205	36000	12800	11.00/20D	12.00/20	Con R6572	6-4 3/4 x5 3/4	572		464	210-2600	7-3 1/4 x14 1/2	Y	Own W-824	5	Own W-824	2F	H	** -7.2	Own W-824	L4IHV	630	975	G	PX	82	10 1/8 x3x3 3/4	TF
21	W-825		150	205	36000	12800	11.00/20D	12.00/20	Con R6602	6-4 7/8 x5 3/4	602		484	218-2600	7-3 1/4 x14 1/2	Y	Own W-825	5	Own W-825	2F	H	** -7.2	Own W-825	L4IHV	630	975	G	PX	82	10 1/8 x3x3 3/4	TF
22	W-816		150	205	36000	14100	12.00/20D	12.00/20	Cum HB600	6-4 1/2 x6	672		500	150-2000	7-4 1/2 x12	Y	Own W816	5	Own W816	SF	H	** -5.6	Own W816	4IHDP	606	1024	G	PX	82	10 1/8 x3x3 3/4	TF
23	W-826		150	205	36000	14300	12.00/20D	12.00/20	Cum HB600	6-4 1/2 x6	672		500	150-2000	7-4 1/2 x12	Y	Own W826	5	Own W826	2F	H	** -5.6	Own W826	L4IHV	630	975	G	PX	82	10 1/8 x3x3 3/4	TF
24	W-817		158	205	36000	14400	12.00/20D	12.00/20	Cum HRF6600	6-5 1/4 x6	743		505	180-2000	7-4 1/2 x16	Y	Own W817	5	Own W817	SF	H	** -5.4	Own W817	4IHDP	606	1024	G	PX	90	10 1/8 x3x3 3/4	TF
25	W-827		158	205	36000	14600	12.00/20D	12.00/20	Cum HRF6600	6-5 1/4 x6	743		505	180-2000	7-4 1/2 x16	Y	Own W827	5	Own W827	2F	H	** -5.4	Own W827	L4IHV	630	975	G	PX	90	10 1/8 x3x3 3/4	TF
26	(D) WA-906		160	205	40000 ▲	16000	13.00/20D	14.00/20S	Cum HRF6600	6-5 1/4 x6	743		505	180-2000	7-4 1/2 x16	Y	Own WA906	12	Own WA906	2F	H	** -6.15	Own WA906	LT4IA	645	1190	G	PX	90	10 1/8 x3 1/2 x3 3/4	TF
27	W2211		160	205	42000 ▲	16500	13.00/20D	14.00/20S	Wau 145GBK	6-5 1/4 x6	779		590	240-2400	7-3 1/2 x17 3/4	Y	Own W2211	12	Own W2211	2F	H	** -6.15	Own W2211	LT4IA	645	1190	G	PX	90	10 1/8 x3 1/2 x3 3/4	TF
28	W2206		160	205	54000 ▲	19000	13.00/24D	14.00/24	H8 1091G1	6-5 3/4 x7	■		960	330-2000	7-3 1/2 x14 1/2	Y	Own W2206	10	Own W2206	2F	H	** -6.3	Own W2206	LT4IA	780	1190	G	PX	90	10 1/8 x3 1/2 x3 3/4	LF
29	(D) WA2208		160	205	42000 ▲	16900	13.00/20D	14.00/20S	Cum NHB-600	6-5 1/4 x6	743		535	200-2160	7-4 1/2 x16 1/2	Y	Own WA2208	12	Own WA2208	2F	H	** -6.15	Own WA2208	LT4IA	645	1190	G	PX	90	10 1/8 x3 1/2 x3 3/4	TF
30	(D) W2209		160	205	54000 ▲	19500	13.00/24D	14.00/24	Cum NHRS600	6-5 3/4 x6	743		800	300-2100	7-4 1/2 x16 1/2	Y	Own W2209	10	Own W2209	2F	H	** -6.30	Own W2209	LT4IA	780	1190	G	PX	90	10 1/8 x3 1/2 x3 3/4	LF
31	Walter (c.f.) FZM		126	150	24000	9000	12.00/20S		Wau MZA	6-4 1/4 x4 3/4	404	5.6	290	125-2600	7-2 5/8 x12 1/2	Y	Own FJN	6	Own M8	2	H	** -8.00	Own FJ	O41A	470	670	G	FI	84	12x3 1/2 x1 1/2	B
32	(c.f.) AEB		126	150	34000	13000	12.00/24S		Wau 140GZ	6-4 5/8 x5 1/2	554	6	440	165-2250	7-3 1/4 x14	Y	Own FC	6	Own FCC	2	H	** -9.00	Own FC	O41A	585	890	G	FI	96	14x3 1/4 x1 1/2	B
33	(c.f.) AGB		138	162	34000	14000	12.00/24S		Wau 145GK	6-5 1/4 x6	779	6	585	215-2000	7-3 1/2 x17 3/4	Y	Own FA	6	Own FCC	2	H	** -9.00	Own FC	O41A	585	890	G	FI	108	14x3 1/4 x1 1/2	B
34	(c.f.) AGR		138	162	42000	15000	12.00/24D		Wau 145GK	6-5 1/4 x6	779	6	585	215-2000	7-3 1/2 x17 3/4	Y	Own FCR	6	Own FC	2	H	** -9.00	Own FC	O41A	585	890	G	FI	108	14x3 1/4 x1 1/2	B
35	Ward La Fr. FD1				35000 ▲	11500	11.00/22	11.00/22	Cont 6513	6-4 1/2 x5 3/4	513	5.9	405	180-2800	7-3 1/4 x14 1/2		Ful 5A620	5	Tim R462W	S2	R	** -8.15	Tim F3100W	BW41A	627	1029	Co	PM		10x3x 1/4	C
36	(D) FD2				35000 ▲	12000	11.00/24	11.00/24	Cum HB600	6-5 1/8 x6	672	17	500	150-1800	7-4 1/2 x16 3/4		Ful 5A920	5	Tim R462W	S2	R	** -8.15	Tim F3100W	BW41A	627	1029	Co	PM		10x3x 1/4	C
37	Willys Jp. CJ-3B	*1503	80	80	3500	*2243	6.00/16S	9.00/13S	Own F4-134	4-3 1/8 x4 3/8	134	6.9	114	72-4000	3-2.33x5	N	WG T90C	6	Spl 44-2	Hy	H	** -5.38	Spl 25	BW41H	118	198	a	F		4x1 3/4 x 1/4	P
38	CJ-5	*1577	81	81	3750	*2274	6.00/16S	9.00/13S	Own F4-134	4-3 1/8 x4 3/8	134	6.9	114	72-4000	3-2.33x5	N	WG T90C	6	Spl 44-2	Hy	H	** -5.38	Spl 25	BW41H	118	198	a	F		4x1 3/4 x 1/4	P
39	F4-134-4WD		118	118	6000	*3200	7.00/16S	9.00/13S	Own F4-134	4-3 1/8 x4 3/8	134	6.9	114	72-4000	3-2.33x5	N	WG T90C	6	Spl 53	H	H	** -5.38	Spl 25	BW41H	176	276	a	2I	42.28	5 1/2 x2x 1/4	TD
40	66-226-4WD	*2046	118	118	6000	*3311	7.00/16S	9.00/13S	Own L6-226	6-3 1/4 x4 3/8	226	5.9	190	115-3650	4-2 3/4 x4 7/8	N	WG T90J	6	Spl 53	H	H	4.88-5.38	Spl 25	BW41H	176	276	a	2I	42.28	5 1/2 x2x 1/4	TD
41	CJ-6	*1731	101	101	3900	2336	6.00/16S	9.00/13S	Own F4-134	4-3 1/8 x4 3/8	134	6.9	114	72-4000	3-2.33x5	N	WG T90C	6	Spl 44-2	Hy	H	** -5.38	Spl 25	BW41H	118	198	a	F		4x1 3/4 x 1/4	P
	Six-Wheelers																														
	Wheels ▼ Driven																														
42	Available *560S		Opt	Opt	40000	▲11750	10.00/20D	11.00/20	Wau 135GZ	6-4 3/8 x5	451	6.3	350	155-2800	7-3 1/4 x14	Y	Fu 5A62●	5	Tim SLD	2F	R	** -7.00	Tim FD900	6IA	870	1451	a	FD	84	9 1/8 x3 1/2 x 1/4	L
43	*600S		Opt	Opt	46000	▲12350	10.00/20D	11.00/24	Wau 140GK	6-4 1/2 x5 1/2	525	6.4	405	188-2800	7-3 1/4 x13 3/8	Y	Fu 5A65●	5	Tim SQD	2F	R	** -7.54	Tim FE900	6IA	998	1659	a	FD	84	9 1/8 x3 1/2 x 1/4	L
44	*610S		Opt	Opt	60000	▲14700	11.00/20D	12.00/24	Wau 145GK	6-5 1/4 x6	779	6.2	600	230-2200	7-3 1/4 x17 3/4	Y	Spl 8051A●	5	Tim SW456	2F	R	** -7.60	Tim FE900	6IA	1118	1867	a	FD	84	9 1/8 x3 1/2 x 1/4	L
45	(D) *630SD		Opt	Opt	60000	▲16250	11.00/20D	12.00/24	Cum NHB	6-5 1/8 x6	743	17.5	535	200-2100	7-4 1/2 x16 1/2	Y	Spl 8051A●	5	Tim SFD4600	2F	R	** -8.07	Tim 27460	6IA	1160	1886	a	FD	84	9 1/8 x3 1/2 x 1/4	L
46	Dodge C-3-YX6		154	190	40000	11525	10.00/20D	10.00/20	Own T-353	6-4 1/4 x5 1/8	413	6.5	343	171-3200	7-3x11 1/4	Y	Cla 290V2	5	Tim SW3020	ASF	L	** -8.5	Tim FD900	TD6IA	812	1262	e	TX	84	10 1/8 x3 1/8 x 1/4	CP
47	Duplex TH6		162	220	30000	9180	8.25/20	9.00/20	Her JXD	6-4x4 1/2	320	6.2	240	113-3000	7-2 1/2 x10 1/4	Y	Fu 5B33●	10	Tim SBD1055	BF	L	** -6.16	Tim FC900	L6IHV	513	839	a	TX	83 3/4	9 1/2 x3 1/2 x 1/4	L
48	RH-6		160	208	40000	11500	10.00/20	11.00/20	Her WXLC3	6-4 1/4 x4 3/4	404	5.8	312	139-2600	7-2 5/8 x13 1/4	Y	Fu 5A43	5	Tim SD3010	2F	R	8.27-	Tim FD900	BW6IA	1075	1525	a	TX	73 1/4	10 1/8 x3 1/8 x 1/4	L
49	(D) L6		172	208	45000	15000	11.00/20	12.00/20	Cum HB600	6-4 7/8 x6	672	17.4	495	150-1800	7-4 1/2 x16 1/2	Y	Fu 5A920	5	Tim SD454	SF2	L	6.8-8.15	Tim FE900	BW6IA	1137	1625	a	TX	77 3/8	10 1/8 x3 1/8 x 1/4	L
50	Fabco (c) FD201A		130	Opt	30000	10500	8.25/20	9.00/20	Chevrolet	6-3 1/2 x3 1/2	261	7.2	220	135-4000	4- ‡‡	N	Chevrolet*	8	Chevrolet	HyF	H	** -6.17	Own RC	O41H	615	950	Co	TX	60	9 1/4	P
51	(c) FD201B		130	Opt	30000	10500	8.25/20	9.00/20	Ford	8-3.5x3.1	239	7.5	215	132-4000	5-2 1/2 x3 1/2		Ford*	10	Ford	HF	H	** -6.8	Own RF	O41HV	609	908		TX	61	9 1/4	P
52	(c) FD201B		130	Opt	30000	10500	8.25/20	9.00/20	Ford	8-3.6x3.1	256	7.5	228	140-3000	5-2 1/2 x3 1/2	Y	Ford*	10	Ford	HF	H	** -6.8	Own RF	O41HV	600	900		TX	61	9 1/4	P
53	(c) FD251B		130	Opt	40000	13000	8.25/20	9.00/20	Ford	8-3.8x3.5	317	7.2	286	170-3900	5-2 3/4 x4 1/8	Y	Ford*	10	Ford	SF	H	7.17-7.67	Own RF	O41HV-A	740	1200		TX	61	9	P
54	FWD 6-324		154	Opt	32000	▲12000	8.25/20D	10.00/20	Int RD372	6-4 3/8 x4 1/2	372	6.5	309	165-3200	7-3 1/4 x10 1/4	Y	Ful 5A620	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	84 3/4	9x3x 1/4	TF
55	6-325		154	Opt	32000	▲12000	8.25/20D	10.00/20	Int RD406	6-4 3/8 x4 1/2	406	6.5	338	175-3200	7-3 1/4 x10 1/4	Y	Ful 5A620	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	84 3/4	9x3x 1/4	TF
56	6-336		154	Opt	36000	▲12440	9.00/20D	10.00/20	Int RD450	6-4 3/8 x5	450	6.2	387	182-3000	7-3 1/4 x10 1/4	Y	Ful 5C650	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	84 3/4	9 1/4 x3x 3/4	TF
57	(D) 6-364D		154	Opt	36000	▲13220	9.00/20D	10.00/20	GMC 4-71	4-4 1/4 x5	284	16	385	150-2100	5-3 1/2 x5 5/8	Y	Ful 5C65	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	84 1/4	9 1/4 x3x 3/4	TF
58	(D) 6-365D		188	Opt	36000	▲14070	9.00/20D	10.00/20	Cum HRBB	6-5 1/4 x6	743		505	180 2000	7-4 1/2 x	Y	Ful 5C72	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	96 3/8	9 1/4 x3x3 3/8	TF

(Turn to Page 110, Please)

For Key to References and Abbreviations See Page 99

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(Continued from Page 108)

Line Number	MAKE AND MODEL	Chassis List Price	WHEEL-BASE Minimum Standard	WHEEL-BASE Maximum Standard	Gross Vehicle Weight for Normal Service	Chassis Weight (See definition)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Authorized Tire Size (Duals unless noted)	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Speeds	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make Location Type Operation	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Min. Std. W. B.)	FRAME: Side Rail Dimensions	Type
	FWD---cont'd																														
1	6-407		154	Opt	40000	▲12780	10.00/20D	10.00/20	Int RD501	6-4 1/2 x5 1/4	501	6.5	444	212-3000	7-3 1/4 x10 1/4	Y	Ful 5C65	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	84 3/4	9 1/4 x3x3 3/4	TF
2	(D).....6-406D		188	Opt	40000	▲14410	10.00/20D	10.00/20	GMC 6-71	6-4 1/4 x5	426	16	600	200-2000	7-3 1/2 x7 3/8	Y	Ful 5A1120	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	96 3/8	9 1/4 x3x3 3/4	TF
3	(D).....6-409D		188	Opt	40000	▲14360	10.00/20D	10.00/20	Cum NHB	6-5 1/2 x6	743	...	535	200-2100	7-4 1/2 x...	Y	Ful 5C72	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IHA	673	990	a	T6	96 3/8	9 1/4 x3x3 3/4	TF
4	6-609		188	Opt	60000	▲17510	12.00/20D	13.00/20	Wau 145GKB	6-5 1/4 x6	779	6.2	595	240-2400	7-3 1/2 x17 3/4	Y	Ful 10A1120	10	Own 6-33	SF	T	5.7-8.53	Own 32	T6IA	1234	1885	a	T6	96 3/8	10x3x1 1/4	CL
5	(D).....6-606D		188	Opt	60000	▲18180	12.00/20D	13.00/20	GMC 6-71	6-4 1/4 x5	426	16	600	200-2000	7-3 1/2 x7 3/8	Y	Ful 10A1120	10	Own 6-33	SF	T	5.7-8.53	Own 32	T6IA	1234	1885	a	T6	96 3/8	10x3x1 1/4	CL
6	(D).....6-609D		188	Opt	60000	▲18010	12.00/20D	13.00/20	Cum NHB	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x...	Y	Ful 10A1120	10	Own 6-33	SF	T	5.7-8.53	Own 32	T6IA	1234	1885	a	T6	96 3/8	10x3x1 1/4	CL
7	.....G6-406		189	...	40000	▲14100	11.00/20D	.....	Int RD-450	6-4 1/2 x5	450	6.2	387	182-3000	7-3 1/4 x10 1/4	Y	Ful 5C65	10	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IA	673	990	a	T6	97 1/2	9x3x 1/4	TFL
8	(D).....R6-404D		229	Opt	40000	▲15650	10.00/20D	.....	GMC 4-71	4-4 1/4 x5	284	16	385	150-2100	5-3 1/2 x5 1/2	Y	Ful R95C	20	Own 6-23	SF	T	4.7-11.5	Own 22	Wg6IA	673	990	a	T6	154	9 1/4 x3x3 3/4	TF
9	(D).....R6-406D		229	Opt	40000	▲16200	10.00/20D	.....	GMC 6-71	6-4 1/4 x5	426	16	600	200-2000	7-3 1/2 x7 3/8	Y	Ful R95C	20	Own 6-23	SF	T	4.7-11.5	Own 22	T4IA	1008	1451	a	T6	120	9 1/4 x3x3 3/4	TF
10	.....L6-408		217	Opt	40000	▲14760	10.00/22D	.....	Wau 145GK	6-5 1/4 x6	779	6.2	595	216-2000	7-3 1/2 x17 3/4	Y	Ful R95C	20	Own 6-23	SF	T	4.7-11.5	Own 22	T4IA	1008	1451	a	T6	120	9 1/4 x3x3 3/4	TF
11	(D).....L6-406D		217	Opt	40000	▲15260	10.00/22D	.....	GMC 6-71	6-4 1/4 x5	426	16	600	200-2000	7-3 1/2 x7 3/8	Y	Ful R95C	20	Own 6-23	SF	T	4.7-11.5	Own 22	T4IA	1008	1451	a	T6	120	9 1/4 x3x3 3/4	TF
12	(D).....L6-409D		217	Opt	40000	▲15430	10.00/22D	.....	Cum NHB	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x...	Y	Ful R95C	20	Own 6-23	SF	T	4.7-11.5	Own 22	T4IA	1008	1451	a	T6	120	9 1/4 x3x3 3/4	TF
13	Kenworth (D)♦522		191	255	43000	14100	10.00/20	11.00/22	Cum NHB600	6-5 1/4 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241	12	T R200P♦♦	2F	H	5 91-9 76	Tim FE900N	BW4IA	880	1368	a	TD	100	9 1/2 x3 1/4 x 1/2	C
14	(D).....♦523-4R		190	255	43000	15200	10.00/20	11.00/22	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241	12	Tim SQW	WF	L	5 67-8 20	Tim FE900N	BW4rIA	868	1400	a	TD	99	9 1/2 x3 1/4 x 1/2	C
15	(D).....♦524-4R		190	255	61000	16400	10.00/20	11.00/22	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241	12	Tim SW456P	WF	L	4 72-8 20	Tim FE900N	BW4rIA	1016	1556	a	TD	99	9 1/2 x3 1/4 x 1/2	C
16	(D).....548-4R		201	...	67000	20150	12.00/24	12.00/24	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241	12	Tim SFD4600	B2F	L	8 07-11 5	Tim FE200W	BW4rIA	1180	1886	a	TD	111	9 1/2 x3 1/4 x 1/2	DB
17	(D).....552-6		178		54000	22500	13.00/24	13.00/24	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241	12	Ti GSWQFR2	WF	L	5 67-8 20	Tim FE900N	BW4rIA	1016	1556	a	TD	99	9 1/2 x3 1/4 x 1/2	C
18	(D).....♦825-4R		190	255	43000	14400	10.00/20	11.00/22	Cum N**B600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241	12	Tim SQD	B2F	L	4 68-9 21	Tim FE900N	BW4rIA	868	1400	a	TD	93	9 1/2 x3 1/4 x 1/2	C
19	.....♦829-4R		175‡	255	43000	14200	10.00/20	11.00/22	HS 590GV3	6-5x7	590	6.6	490	232-2800	7-3 1/4 x12 1/2	Y	Fu 5C720	15	Tim SQD	B2F	L	4 68-9 21	Tim FE900N	BW4rIA	868	1400	a	TD	93	9 1/2 x3 1/4 x 1/2	C
20	(D).....848-4R		210‡	234‡	98000	20000	12.00/24	14.00/24	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241▲	12	Tim SFD4600	B2F	L	8 07-11 6	Tim 27462N	BW6rIA	1016	1556	a	TD	118 3/4	Variable	C
21	(D).....849-4R		210‡	234‡	98000	21700	12.00/24	14.00/24	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241▲	12	Tim SFD4600	B2F	L	8 07-11 6	Tim 27436W	BW6rIA	1080	1785	a	TD	118 3/4	Variable	C
22	(D).....*850-4R		210‡	234‡	98000	21900	12.00/24	14.00/24	Cum NHB600	6-5 1/2 x6	743	16	535	200-2100	7-4 1/2 x13 1/2	Y	BL 8241▲	12	Tim SFD4600	B2F	L	8 07-11 6	Tim 27436W	BW6rIA	1080	1785	a	TD	118 3/4	Variable	C
	Oshkosh																														
23	.....W-825-6X6		178	Opt	45000	12500	11.00/20	11.00/20	Cum R6602	6-4 7/8 x5 3/8	602	...	484	218-2600	9-3 1/4 x14 1/2	Y	Own W-825	5	Tim SFD3020	2F	L	** -7.2	Own W-825	LT6IA	1156	1889	G	PX	110	10 1/2 x3 1/4 x3 1/2	B
24	.....W-826-6X6		178	Opt	45000	19000	11.00/20	11.00/20	Cum HB600	6-4 3/4 x6	672	...	500	150-2000	7-4 1/2 x12	Y	Own W-826	5	Tim SFD-3020	2F	L	**-5.6	Own W-826	LT6IA	1156	1889	G	PX	110	10 1/2 x3 1/4 x3 1/2	B
25	.....°°W1602		Opt	Opt	95000	.....	14.00/24D	14.00/24	Optional	.....	.....	.....	.....	.....	.....	.....	.....	s	Tim SD472	2F	L	.....	Own WA-1602	LT6IA	...	2217	...	Opt	Opt	12 1/2 x3 7/8 x3 1/2	B
26	.....°°WA1600		Opt	Opt	60000	.....	11.00/24D	12.00/24	Optional	.....	.....	.....	.....	.....	.....	.....	.....	s	Tim SFD4600	2F	L	.....	Own WA-1600	LT6IA	1156	1189	...	Opt	Opt	12 1/2 x3 7/8 x3 1/2	B
27	Peterbilt (D)...350		193	Opt	36000	.....	10.00/20D	11.00/22	Cum NHB600	6-5 1/4 x6	743	17	500	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	Tim SW-3456	WF	R	6.16-6.80	TimFe900DPA	BW6IA	1125	1569	...	TD	99 1/2	10 3/4 x3 1/4 x 1/2	CT
28	(D).....360		198	Opt	36000	.....	10.00/20D	11.00/22	Cum NHB600	6-5 1/2 x6	743	17	500	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	Tim SW-459	WF	R	6.16-6.80	TimF3900DPA	BW6IA	1005	1517	...	TD	104 7/8	10 3/4 x3 1/4 x 1/2	CT
29	(D).....381		194	Opt	44000	.....	10.00/20D	11.00/22	Cum NHB600	6-5 1/2 x6	743	17	500	230-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	Tim SFD4600	2F	R	**-10.16	T 27463	BW6IA	1084	1626	...	TD	98 1/2	10 3/4 x3 1/4 x 1/2	CT
30	(D).....350(coe)		135	Opt	36000	.....	10.00/20	11.00/22	Cum NHB600	6-5 1/2 x6	743	17	500	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	SW 3456	WF	R	6.16-6.80	TimFe900DPA	BW6IA	1125	1569	...	TD	93 1/4	10 3/4 x3 1/4 x 1/2	CT
31	(D).....351		190	Opt	36000	13200	10.00/20	11.00/22	Cum NHB600	6-5 1/2 x6	743	17	500	200-2100	7-4 1/2 x16 1/2	Y	Spi 8045	12	Tim SW3458			6.16-7.35	Tim FE900N	BW6IA	...	...	...	...	...	...	...	...
32	(D).....360(coe)		135	Opt	36000	.....	10.00/20	11.00/22	Cum NHB600	6-5 1/2 x6	743	17	500	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	SW 459	WF	R	6.16-6.80	TimFe900DPA	BW6IA	1005	1517	...	TD	93 1/4	10 3/4 x3 1/4 x 1/2	CT
33	Reo.....F-226		150	203	42000	9975	9.00/20	10.00/20	Own 331▲	6-3 7/8 x4 1/2	331	6.4	264	140-3200	7-2 1/2 x9 .408	Y	Cla 205V	5	Tim SLD	F2	T	7.67-9.33	Tim FD900	T6IVH	938	1394	var	TD	85 3/4	9 1/4 x3 1/4 x 1/4	Tf
34	.....F-506		150	203	42000	10090	9.00/20	10.00/20	Own 160■	6-4 1/2 x4 1/2	331	6.7	290	160-3200	7-2 3/4 x9 1/4	Y	Cla 290V	5	Tim SLD	F2	T	7.67-9.33	Tim FD-900	T6IVH	938	1394	var	TD	85 3/8	9 1/4 x3 1/4 x 1/4	TF
35	.....F-536			200	48000	11600	10.00/20	11.00 22	Own 160	6-4 1/2 x4 1/2	427	6.4	348	160-2800	7-2 3/4 x9 1/4	Y	Cla 290V	5	Tim SQD	F2	T	7.54-9 21	Tim FE-900	TWs6IA	982	1808	var	TD	90 3/4	9 1/4 x3 1/4 x 1/4	TfP
36	.....F-506M		150	203	47000	11765	11.00/20†	11.00/20†	Own 160	6-4 1/2 x4 1/2	331	6.7	290	160-3200	7-2 3/4 x9 1/4	Y	Cla 290V	5	Tim SLD	F2	T	** -9.33	Tim 27461	TWs6IA	838	1362	var	TD	85 3/8	9 1/4 x3 1/4 x 1/4	TfL
37	.....F-226 (6x6)		150	203	42000	11325	9.00/20	10.00/20	Own 331▲‡	6-3 7/8 x4 1/2	331	6.4	264	140-3200	7-2 1/2 x9 .408	Y	Cla 205V	5	Tim SLD	F2	T	** -7.66	Tim F-2090	TWs6IA	908	1470	var	TD	90	9 1/4 x3 1/4 x 1/4	TL
38	.....F-536-M		155	200	52000	12050	11.00/20†	11.00/22†	Own 160■	6-4 1/2 x4 1/2	331	6.7	290	160-3200	7-2 1/2 x9 1/4	Y	Cla 290V	5	Tim SQD	F2	T	** -9.21	Tim 27461	TWs6IA	982	1808	var	TD	90 3/4	9 1/4 x3 1/4 x 1/4	TfL
39	.....F-50 (6X2)		140	185	40000	9890	9.00/20	10.00/20	Own 160■	6-4 1/2 x4 1/2	331	6.7	290	160-3200	7-2 1/2 x9 1/4	Y	Cla 265V	5	Tim SQTT335	HFd	H	6.63-8.51	Tim FD900	TWs6IA	862	1394	var	TX	75 3/4	9 1/4 x3 1/4 x 1/4	TC
40	.....F-50T (6X2)		140	140	40000	10140	9.00/20	10.00/20	Own 160■	6-4 1/2 x4 1/2	331	6.7	290	160-3200	7-2 1/2 x9 1/4	Y	Cla 265V	5	Tim SQTT335	HFd	H	6.63-8.51	Tim FD900	TWs6IA	862	1394	var	TX	75 3/4	9 1/4 x3 1/4 x 1/4	TC
41	.....A-620		139	199	40000	10940	9.00/20	10.00/20	Own OV195▼	8-3 7/8 x4 1/2	390	7.3	345	195-3200	5-3x5 .7	Y	Spi 6352	5	Tim SQTT235	HF2	H	6.43-6.91	Tim FD-900	TWs6IA	862	1394	var	TD	72	9 1/4 x3 1/4 x 1/4	CC
42	.....A-623		133	151	40000	11205	9.00/20	10.00/20	Own OV195▼	8-3 7/8 x4 1/2	390	7.3	345	195-3200	5-3x5 .7	Y	Spi 6352	5	Tim SQTT335	HFd	H	6.63-8.51	Tim FD-900	TWs6IA	862	1394	var	TD	66	9 1/4 x3 1/4 x 1/4	CC
43	.....A-630		151	199	42000	11285	9.00/20	10.00/20	Own OV195▼	8-3 7/8 x4 1/2	390	7.3	345	195-3200	5-3x5 .7	Y	Spi 6352	5	Tim SLD	F2	T	6.41-9.33	Tim FD-900	TWs6IA	862	1394	var	TD	84	9 1/4 x3 1/4 x 1/4	CC
44	.....A-633		157	187	42000	11735	9.00/20	10.00/20	Own OV195▼	8-3 7/8 x4 1/2	390	7.3	345	195-3200	5-3x5 .7	Y	Spi 6352	5	Tim SLDD	F2	T	6.41-9 33	Tim FD-900	TWs6IA	862	1394	var	TD	90	9 1/4 x3 1/4 x 1/4	CC
45	.....A-730		151	199	48000	12545	10.00/20	11.00/22	Own OV195▼	8-3 7/8 x4 1/2	390	7.3	345	195-3200	5-3x5 .7	Y	Spi 6352	5	Tim SQD::	F2	T	6.44-9.21	Tim FE-900	TWs6IA	982	1808	var	TD	84	9 1/4 x3 1/4 x 1/4	CC
46	.....A-733		157	187	48000	13035	10.00/20	11.00/22	Own OV195▼	8-3 7/8 x4 1/2	390	7.3	345	195-3200	5-3x5 .7	Y	Spi 6352	5	Tim SQDD::	F2	T	6.44-9.21	Tim FD-900	TWs6IA	982	1808	var	TD	90	9 1/4 x3 1/4 x 1/4	CC
	Truckstell																														
47	(C) F600....4R		152	221	28000	7960▲	7.50/20	8.25/20	Ford	8-3 1/8 x3 3/4	239	6.8	194	106-3500	3-2 1/4 x12 .7		Ford	12	Ford	HF	R	** -6.8	Ford	F6IHV	612	836	Co	TX	82	9 3/4 x3x3 1/2	C▼▼
48	(C) F700....4R		153	225	32000	8980▲	7.50/20	9.00/20	Ford	6-3 1/2 x4 .4	254	6.8	212	112-3500	4-2 1/2 x13 .8		Ford ♦♦	12	Ford	HF	R	** -7.2	Ford	F6IHV	755	1169	Co	TX	82	9 3/4 x3x 1/2	C▼▼
49	(C) F750....4R		153	225	34000	9350▲	8.25/20	9.00/20	Ford	8-3 1/2 x3 1/2	279	7	244	145-3800	5-2 3/8 x15		Ford ♦♦	15	Ford	HF	R	** -7.2	Ford	F6IHV	755	1169	Co	TX	82	9 3/4 x3x .65	CC▼▼
50	(C) F800....4R		153	225	40000	10170▲	9.00/20	10.00/20	Ford	8-3.8 x3 1/2	317	7.1	284	155-3900	5-2 3/8 x15		Ford ♦♦	15	Ford	SF	R	** -7.17	Ford	†	856	1231	Co	TX	82	9 3/4 x3x .65	CC▼▼
51	(C) F900....4R		153	225	48000	11600▲	10.00/20	11.00/20	Ford	8-3.8 x3 1/2	317	7.1	284	155-3900	5-2 3/8 x15		Ford ♦♦	15	Ford	SF	R	** -7.17	Ford	†	950	1370	Co	TX	82	9 3/4 x3x .65	CC▼▼
52	(C) C5403...4R		126	204	28000	7800▲	7.50/20	9.00/20	Chev.	6-3 7/8 x3 1/2	235	6.7	193	105-3600	4-St. Chev.		Chev. ♦♦	12	Chev.	HF	R	** -6.17	Chev.	C6IHV	607	930	Co	TIX	83	9 3/4 x3x 1/2	CC▼
53	(C) C6103...4R		160	229	30000	7650▲	7.50/20	9.00/20-10	Chev.	6-3 7/8 x3 1/2	235	7.1	200	108-3500	4-St. Chev.		Chev. ♦♦	12	Chev.	HyF	R	** -6.17	Chev.	C6IHV	607	930	Co	TIX	83	9 3/4 x3x 1/2	CC▼
54	Ward La Fr..DIT‡		180	220	39500	.....	10.00/20	11.00/20	Con T6427	6-4 1/4 x4 1/2	427	...	340	152-2600	.....		Fu 5A43▲▲	15	Tim SD3010P	2F	L	** -8.27	Tim FD900	T4IA	.....	.....	D	.....	.....	10x3 1/2 x 1/4	C
55	.....D3T▲▲		180	220	39500	.....	10.00/20	11.00/20	Con R6572	6-4 1/4 x5 1/2	572	...	440	198-2600	.....		Fu 5C65▲▲	15	Tim SD3010P	2F	L	** -7.50	Tim FD900	T4IA	.....	.....	D	.....	.....	10x3 1/2 x 1/4	CC
56	.....D3ST▲▲		180	220	39500	.....	10.00/20	11.00/20	Con R6602	6-4 3/4 x5 1/2	602	...	463	206-2800	.....		Fu 5C72▲▲	15	Tim SD3010P	2F	L	** -7.50	Tim FD900	T4IA	.....	.....	D	.....	.....	10x3 1/2 x 1/4	CC
57	(D).....D5T▲▲		180	220	42000	.....	11.00/20	11.00/20	Cum HB600	6-4 1/2 x6	672	...	500	150-1800	.....		Fu 5C72▲▲	15	Tim SD3010P	2F	L	** -6.84	Tim FE900	T4IA	.....	.....	D	.....	.....	10x3 1/2 x 1/4	CC
58	(D).....D5RT▲▲		180	220	42000	.....	11.00/20	11.00/20	Cum HRB600	6-5 1/2 x6	743	...	540	165-1800	.....		Fu 5C72▲▲	15	Tim SD3010P	2F	L	** -6.84	Tim FE900	T4IA	.....	.....	D	.....	.....	10x3 1/2 x 1/4	CC
59	(D).....D5NT▲▲		180	220	42000	.....	11.00/20	11.00/20	Cum NHB600	6-5 1/2 x6	743	...	540	200-2100	.....		Fu 5C72▲▲	15	T SW3012PA	WF	L	** -6.17	Tim FE900	T4IA	.....	.....	D	.....	.....	10x3 1/2 x 1/4	
60	White-Freightliner																														
61	.....WF64		196	...	.....	13470	10.00/20	.....	Cum NHB	6-5 1/4 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	Tim SQW	WF	H	** -6 1/4	Tim FE900	O4rIA	966	1450	a	TD	154	10 3/4 x3 1/4 x 1/4	DL
62	.....WF64T		156	248	.....	13240	10.00/20	.....	Cum NHB	6-5 1/2 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Fu R95C	10	Tim SQW	WF	H	** -6 1/4	Tim FE900	O4rIA	966	1450	a	TD	114	8 1/4 x3 1/2 x 3/8	D
63	.....WF6542T		115	120	.....	10560	10.00/20	.....	Cum NHB	6-5 1/2 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	8	Tim R330	SFD	H	4.77-6 38	Tim FE900	O4rIA	645	1450	a	TD	78	8 1/4 x3 1/2 x 3/8	D
64	.....WF7564T		156	248	.....	13230	10.00/20	.....	Cum NHB	6-5 1/2 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Fu R95C	10	Tim SQW	WF	H	** -6 1/4	Tim FE900	O4rIA	966	1450	a	TD	109	8 1/4 x3 1/2 x 3/8	D
65	.....WF5842T		115	120	.....	10640	10.00/20	.....	Cum NHB	6-5 1/2 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	8	Tim R330	SFD	H	4.77-6 38	Tim FE900	O4rIA	645	1450	a	TD	85	8 1/4 x3 1/2 x 3/8	D
66	.....WF5844		115‡	...	.....	12030	10.00/20	.....	Cum NHB	6-5 1/2 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Ful R95C	10	Tim R230	SFD	H	** -5 .54	Tim FE900	O4rIA	645	1450	a	TD	85 3/4	9x3 1/2 x 1/4	
67	.....WF6564		196		.....	13440	10.00/20	.....	Cum NHB	6-5 1/2 x6	743	13	575	200-2100	7-4 1/2 x16 1/2	Y	Spi 8041	12	Tim SQW	WF	H	** -6 1/4	Tim FE900	O4rIA	966	1450	a	TD	159	10 3/4 x3 1/4 x 1/4	DL
68	.....WF7564		196		.....	13470	10.00/20	.....	Cum NHB	6-5 1/4 x6	743	13	575	200-2100	7-4 1/2 -16 1/2	Y	Spi 8041	12	Tim SQW	WF	H	** -6 1/4	Tim FE900	O4rIA	966	1450	a	TD	149	10 3/4 x3 1/4 x 1/4	DL

For Key to References and Abbreviations See Page 99

there are at least 19 factors contributing to oil contamination

. . . continuously causing oil contamination build-up during normal operation . . . including

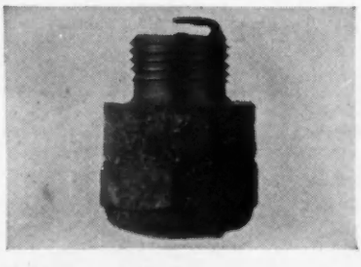
PISTON RINGS . . . CARBURETOR . . . DISTRIBUTOR . . . SPARK PLUGS . . . AIR CLEANER . . . BREATHER CAP . . . RADIATOR . . . TIMING GEAR . . . WIRING . . . BATTERY . . . AND MANY OTHERS

To fully protect an engine, an oil filter must be designed to remove *all* contaminants from the oil, especially *water*, the chief cause of sludge and source of corrosive acids.

The Walker Replacement Oil Filter Cartridge provides complete protection because THE WALKER CARTRIDGE IS ABLE TO ***ABSORB AND HOLD*** THE WATER OUT OF OIL.

. . . . . this special water absorbing ability helps protect engines against damage from permanent anti-freeze seepage.

These two examples illustrate this contamination process which is taking place all through the life of the engine:

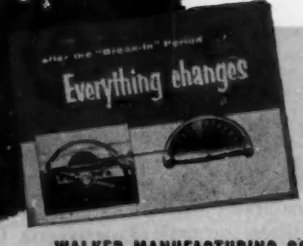


SPARK PLUGS — normal wear causes change of spark gap, which impairs combustion efficiency. Faulty combustion means increased oil contamination from the blow-by of water and other combustion by-products.

WALKER Cartridges give *complete* protection throughout *entire* engine life.

PISTON RINGS — normal wear and carbon deposits impair the rings' ability to form a seal with the cylinder wall. This means increasing "blow-by" of *water* and other combustion by-products which must be removed from the oil.

WALKER Cartridges give *complete* protection throughout *entire* engine life.



This free illustrated book tells the factual story of oil contamination build-up and oil filtration problems. Mail your request, on your company letterhead, to . . .

WALKER
REPLACEMENT CARTRIDGE
Gives Added Protection in Any Make or Type Oil Filter

WITH PATENTED Lamigar CONSTRUCTION

WALKER MANUFACTURING COMPANY OF WISCONSIN . . . RACINE, WISCONSIN . . . Oil Filters . . . Exhaust Silencers . . . Jacks

Passing on the Right, Is It Legal?

EVERY TRUCK driver disobeys at least three traffic laws all at once every day. When he comes to an intersection and finds a car in the center lane signalling for a left turn, the practical and customary thing to do is pass quietly on the right.

Here are the three violations: One is passing on the right. Two is passing at an intersection. Three is passing without a warning signal.

Change of Mind

No one pays any attention to these criminal acts unless something goes wrong. The most frequent thing to go wrong is for the driver who is signalling for a left turn to change his mind and make a right turn into the path of the truck.

Then you can be sure that the lawyer for the driver of that car will bring up the violations as evidence of negligence and try to hold the truck company responsible. The theory will be that the truck driver was breaking the law at the time of the accident and his violation of law caused it.

A North Carolina fleet owner has just been taken in this situation. His truck-trailer rig was rolling out of Asheboro, N. C., on Route 49 when a taxi slowed down in the center lane and signalled for a left turn. The tractor swung a little to the right and kept on going. The taxi driver saw his fare on the right curb and cut right to make a U turn and pick them up. There was no stopping the truck. It went right over the taxi and tossed it into the shoulder about 40 ft beyond the intersection. The truck company was held responsible.

Blow Your Horn

The judge said that of the three laws that were broken here, he only considered the failure to warn when passing as significant. He said that while it is natural to pass on the right when a vehicle signals that it is going to make a left turn, it is still illegal, but few judges will hold a driver at fault who does so. However, he said, you should always blow your horn when passing to warn the driver in the center lane that you are going by.

Other judges have ruled the same way, and the only safe thing to do is to always honk when passing on the right. Many drivers hesitate to push the horn when going by on the right because jumpy motorists sometimes instinctively swing right when they hear a horn right behind them. Practical or not, from a legal point of view the horn should always be hit when passing on the right.

Pass When Safe

It is always a technical violation of law to pass on the right but practical judges have tamed down the rule of law and interpreted it to mean that it is permissible to pass on the right when it is safe to do so.

In other words you always pass on the right at your own risk, and if there is an accident it will probably be your fault. If a warning is given when passing, it puts the other driver on the alert and then if he cuts into the path of the passing truck, the accident is his fault.

E
TRUCK BODY HARDWARE
THE PREDOMINATE CHOICE OF LEADING TRUCK BODY BUILDERS
as indicated here with just a few of the many outstanding body jobs being produced every day by various body builders.
Body by Grant Body & Equipment Co. Tulsa, Okla.
Body by Batavia Body Co. Batavia, Ill.
Body by York Hoover Corp. York, Pennsylvania
Body by Keystone Trailer & Equipment Co., Inc., Kansas City, Mo.
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Division of the Eastern Malleable Iron Company
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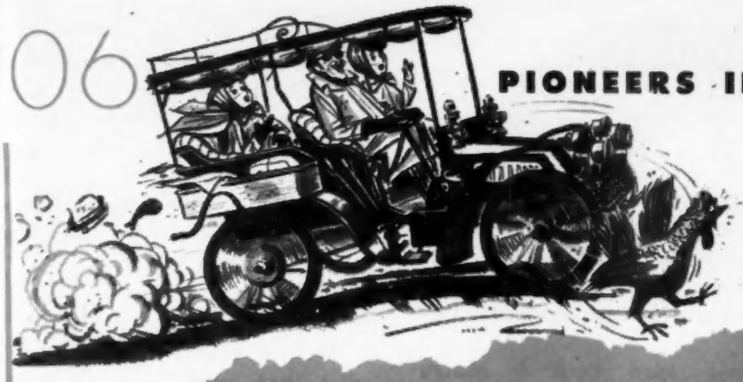
TRUCK BODY HARDWARE BY
EBERHARD
THE MOST COMPLETE LINE AVAILABLE

1906



PIONEERS IN ENGINEERING PROGRESS

Introduced in 1906 . . . the first Brunner air compressor, like the "horseless carriage", was an engineering achievement of the times.

TODAY . . . Tested by the past . . .
choose BRUNNER for the future!
There's a Brunner Air Compressor for every job that requires compressed air.

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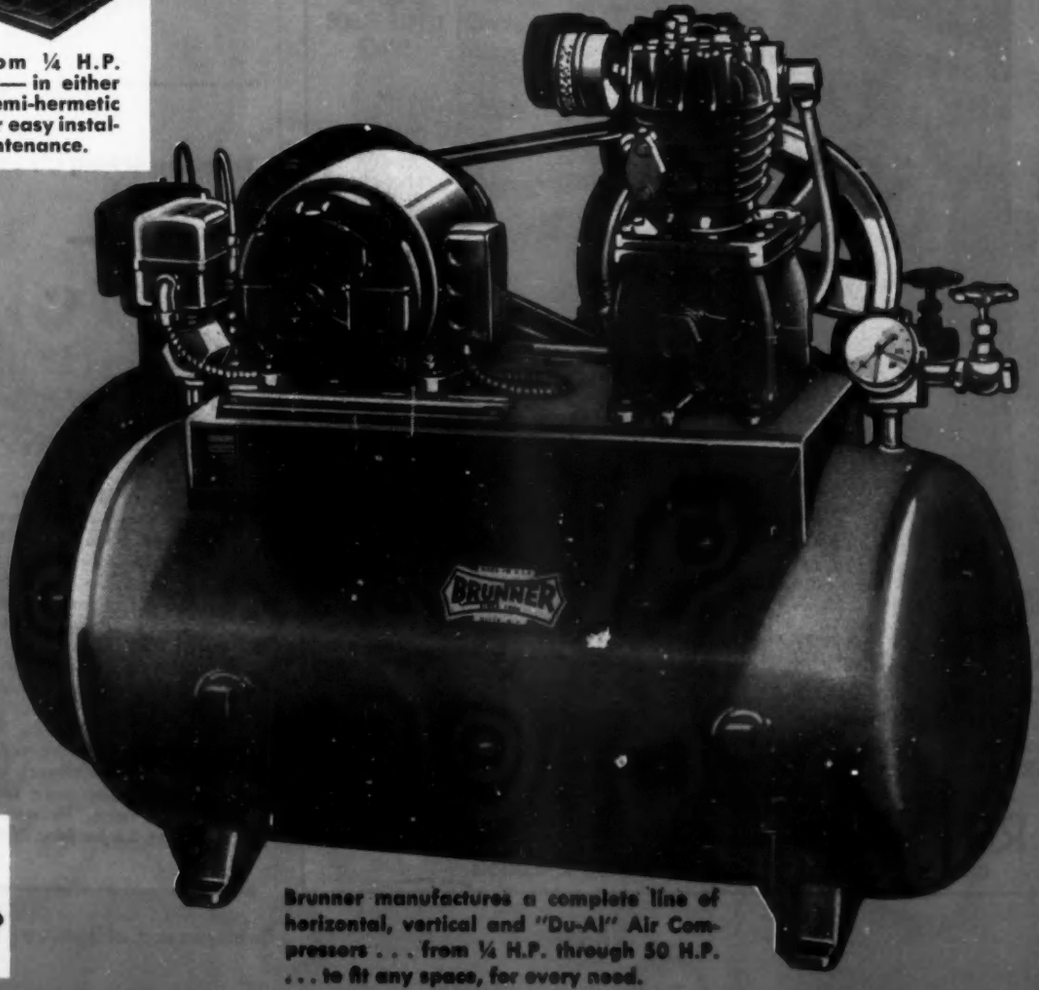
TRUCK REFRIGERATION CONDENSING UNITS

available from ¼ H.P. through 2 H.P. — in either open-type or semi-hermetic models. Built for easy installation and maintenance.



Brunner manufactures a complete line of horizontal, vertical and "Du-Al" Air Compressors . . . from ¼ H.P. through 50 H.P. . . . to fit any space, for every need.

50th Anniversary PROVEN QUALITY BRUNNER DEPENDABLE

Electronics Guide Cargo Loading

Continued from Page 75

We must also recognize that, with the advent of the high-cube trailer, a trend has been established for constantly greater payload. This trend makes it dangerous to rely solely on "over equipping" tractors to protect against overload conditions, as this may no longer serve the purpose. More importantly, since truck operators are spending big money to get equipment for higher payload, they should get this higher payload.

Proper load control instrumentation makes it possible for operators with standard trailers to realize a higher average payload than operators using high cube trailers without proper control. The secret is not in having bigger trailers—it is in using the available trailers to their maximum efficiency. And that means adequate load control.

Prediction

Within a very few years I predict that built-in electronic load control equipment will be as much a part of the trailer as the tires. Trucking companies won't be able to compete without it, and private carriers using intercity units will find it cutting their transportation costs.

When the first large trucking company is equipped with a complete load control system, an entirely new standard of operations will blossom out all over the trucking industry. High profits will make it possible to reduce rates, and this will have a very great effect upon the truck operators' ability to compete with the railroads.

(TURN TO PAGE 116, PLEASE)

INTRODUCING . . . "JUNIOR WILSON"

A NEW — LOW-COST

TRUCK and BUS WASHER

THE VERSATILE WASHER
FOR SMALL OR LARGE FLEET-OWNERS

Speedy & Effective For:

BUSES • TRAILERS • VANS • PANEL TRUCKS •

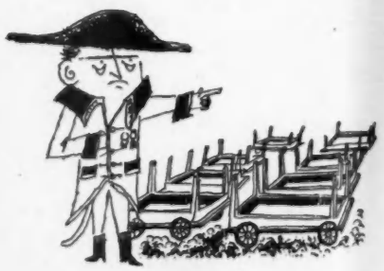
EASY TO INSTALL • TAKES UP LITTLE FLOOR SPACE • OPERATES IN LOW CLEARANCE • EASY TO OPERATE • UNLIMITED HIGH AND LOW REACH •

FIVE TO SEVEN MINUTES!

is all the time it takes for one man and "Junior Wilson" to wash the average TRAILER OR BUS. The machine just ROLLS ALONG, motivated by its revolving brush. The operator merely guides the washer while the 45" long, 18" diameter brush does the rest. (Also available 36" long.) Brush is easily raised and lowered to desired operating level by handy winch. Write Dept. 3-W for full information.

ROSS AND WHITE COMPANY.
CHICAGO DAILY NEWS BUILDING, CHICAGO 6, ILLINOIS

Trucking Along . . . By Bess Ritter



Napoleon Bonaparte himself was one of the first truck owners of France all the way back in 1790 when a considerable number of vehicles were needed to carry ammunition. Since no such conveyance was in existence at the time, he contrived his own by confiscating 36 large tables from the Chateau Thermier and other great estates. Then he commanded his men to turn them upside down. This formed the truck beds. Finally, wheelwrights were instructed to add the necessary attachments, and the emergency deliveries were made. They resulted, in turn, in one of his early and more important victories.

50

1906 · 1956

YEARS

. . . of service
to the industry.
. . . Easy,
safe, economical
Steering!

Ross STEERING

ROSS GEAR AND TOOL COMPANY, INC. • LAFAYETTE, INDIANA

. . . Cargo Loading

Continued from Page 114

It is now possible to equip trailers with the necessary load control devices and at reasonable cost, compared with the profit potential. These are not mere overload gauges, but are actual weighing tools that indicate the load through the entire range from empty to full. With the equipment available it is possible to set up a complete master load control system, as shown in the accompanying drawings.

Possibilities

When a trailer is backed into loading position at the dock, it may be plugged into the master system and the load on all four corners of the trailer will be under constant surveillance. The superintendent's office may be equipped with a large layout board showing each of the loading positions at the dock. For each position there are five lights: one shows that the position has a trailer in it, the other four are for the corners of each trailer and light up whenever that portion of the trailer is overloaded. A set of four lights may also be set up at each loading position, again corresponding to the four corners of the trailer, so loaders may continue loading until a light goes on to indicate an excess load.

When the trailer is loaded and ready for departure, the dock supervisor can press a close-out button at the trailer point. This will indicate completed loading on the master control system. If desired, this action may be used to punch a card showing the loaded weight of the trailer. By using existing punched card systems, a totalized report may be automatically tabulated, typed and ready within one hour after the dock is cleared. This operation is fully automatic. Human errors are eliminated, and immediate information is available.

Load Control Benefits

Load control is a tool which as yet is not being properly used by the trucking industry. When it is properly applied, the inevitable result will be good for everyone concerned. The cycle will probably be something like this:

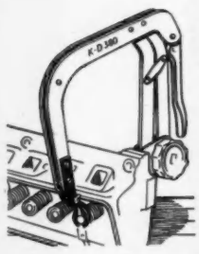
Trucking companies will reduce their operating costs. The savings will be passed on to shippers through lower rates. Lower rates will draw additional business to offset the effect on personnel needs of improved efficiency. And the better service and rates will undoubtedly have a direct effect upon the economy and the living standards of our entire country.

(Cemco Industries, Galion, Ohio, has come up with another view on trailer weighing. It is a scale unit, hydraulically operated, that raises the nose-end of a loaded trailer to get the weight. It's more completely described in the New Products section of this issue, see page 85 . . . The Editor).

END

Please Resume Reading Page 76

K-D Tips on Tools

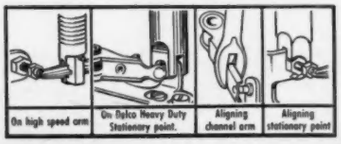


K-D 380 Valve Spring Compressor. For valve-in-head and L-head engines, old or new. Most popular valve tool in U. S. A. Spans exhaust manifold on late Chrysler engines. Use No. 32 Jaws.

428 Hose Clamp Pliers. Takes the hard work out of taking these clamps off, putting them back. Jaws swivel thru 180 degrees, let you do the job at any angle or position. Services all sizes, large or small, industrial or automotive.

OVERCOMES DIFFICULTIES OF REMOVING, INSTALLING THIS TYPE HOSE CLAMP.

NEW K-D 111 Universal Ignition Point Aligning Tool. Designed to handle all types of contact points in all types of distributors, right in the distributor. See the 4 arms in use below.



NEW K-D 113 Ignition Point Wrench. For aligning Delco heavy duty stationary points right in the distributor. Carefully machined, correctly tempered.

K-D "BRITE-STEEL" WASHERS. Highest quality steel. Conform strictly to SAE, U. S. Standard. Sizes ⅛" to 1". Ask your Jobber.

FREE NEW CATALOG Over 150 Tools to make hard jobs easy. Just off press. Write today.
K-D MFG. CO., LANCASTER, PA.

K-D TOOLS

K-D Tools are real "hustlers" for your toolbox. You make better time and more profit by using them, because they are designed by Mechanics for You.

nothing to compare with Filko's Exclusive Completeness...

Filko Pre-Set contact combinations

Skyblazing a Galaxy of Filko Gems of Achievement!

dynamic *Pre-Set Contact Combinations* now widely imitated but never equalled—the one truly factory set to Filko precision standards!

dynamic *filko Condensers* Incomparable quality, unrivaled for sealed-in dependability and precision application conformity!

dynamic *filko Caps & Rotors* famous for the Quality Glow of Chemurgic perfection, enriched composition for durability!

dynamic *filko Coils* brilliantly conceived and produced, embodying superlative design concepts for functional ignition perfection!

dynamic *filko Voltage Regulators* rich in meticulous attention to extreme detail, so characteristic of Filko's demanding thoroughness!

dynamic *filko Solenoid Switches* immediate in full capacity response; Filko designed for enduring mechanical service!

dynamic *filko Magneto Contacts* specialized in designs to open unrivaled opportunities in small motor replacement field!

More than a replacement part ... a true improvement in Ignition

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Filko

"the Crown Jewels of Ignition"®

A true improvement in ignition performance is emphatically assured when reliance is placed upon Filko Crown Jewel Pre-Set Contact Combinations and the galaxy of other Filko "Crown Jewels of Ignition." Each offers something extra in precision performance and customer satisfaction. Too, Filko's exclusive completeness of ignition components gives maximum assurance that every ignition requirement can be satisfied to the fullest!

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4248 W. Chicago Ave., Chicago 51, Ill.
Warehouses in: Los Angeles, Oakland, Miami, Fort Worth, New York, Boston, Cleveland, Atlanta, Lubbock, Little Rock, Philadelphia.

Fleetman's Library

Continued from Page 88

Welder for small jobs is described in this folder available from Lincoln Electric Co. It is the "Lincwelder 100" with 50-100 amp current range and maximum open circuit voltage of 70 volts. Circle L 5 on the postcard on page 84 for a free copy of the folder.

Steam cleaner line made by Malsbary Mfg. Co. is illustrated in a new bulletin showing actual applications in fleet work of the various models. Circle L 6 on the postcard for a free copy.

Cleaning machines to cut parts and component cleaning time in the shop are described in this new bulletin on impeller type units made by Storm-Vulcan, Inc. Circle L 7 on the postcard on page 84 for your free copy.

Construction bodies with crew compartments are described in this new bulletin from J. H. Holan Corp. Bodies range in length from 130 to 176 in. For a copy of the bulletin, circle L 8 on the postcard on page 84.

Fleet manual that provides maintenance check lists, records of work performed, etc., is offered free to construction equipment fleet operators using "Wix-Pax" service. For information, write Wix Corp., Gastonia, N. C.

Safety and accident prevention publications listing by the Government Printing Office includes several on both shop and driving safety. For a free copy, write Superintendent of Documents, Government Printing Office, Washington 25, D. C. Ask for "A List of Safety and Accident Prevention Publications," Form No. 0-353302.

Safety slidefilms applicable to truck driver training are included in this available general catalog of slidefilms. Price is $1, and it can be obtained from Audio-Visual Division, DuKane Corp., St. Charles, Ill. Title is, "Sound Slidefilm Guide."

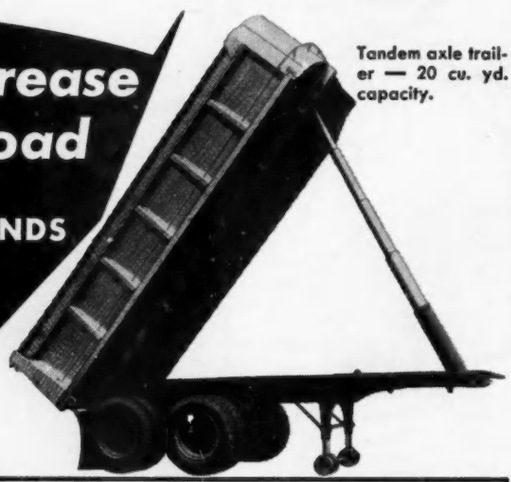
Tarpaulins, both cotton duck and nylon, made by Hoosier Tarpaulin & Canvas Goods Co. are covered in this descriptive bulletin. Circle L 9 on the postcard for your free copy.

Metal cleaners are described according to the job they will do in this bulletin published by Brulin & Co. For your free copy, circle L 10 on the postcard on page 84.

Air compressor selector in the form of a slide rule has just been issued by the Kellog Division, American Brake Shoe Co. For information on obtain-

(TURN TO PAGE 120, PLEASE)

Now-Increase your payload 2,500 POUNDS with this



Tandem axle trailer — 20 cu. yd. capacity.

PENN Aluminum Trailer Body and front mounted hoist!

Haul more coal, lime, sand, gravel, asphalt, cinders, fertilizer and bulkgrain.

● Heavier payloads and increased profits result when you haul in Penn Aluminum Bodies. Lighter in weight these aluminum bodies are as sturdy and strong as conventional bodies. Gasoline consumption and tire wear are lessened by the reduced body weight. Body, chassis and hoist as illustrated weigh 9200 pounds as compared with 11,700 pounds for a like steel body—a weight savings of 2500 pounds. On larger bodies the weight advantage is even greater.

PENN FRONT-MOUNTED HOISTS ARE . . .

LIGHTER — because of the single hoist and the fewer parts required for its installation.

EFFICIENT — it places more weight on the tractor axle and less on the trailer chassis axle.

SAFER — all body overhang is eliminated since the load is lifted from the front—greater stability is assured. When in use, this hoist has proved to be more than 95% safer than other types of hoist installations.

ECONOMICAL — the single hoist requires less parts and maintenance.

Your Inquiries are welcome

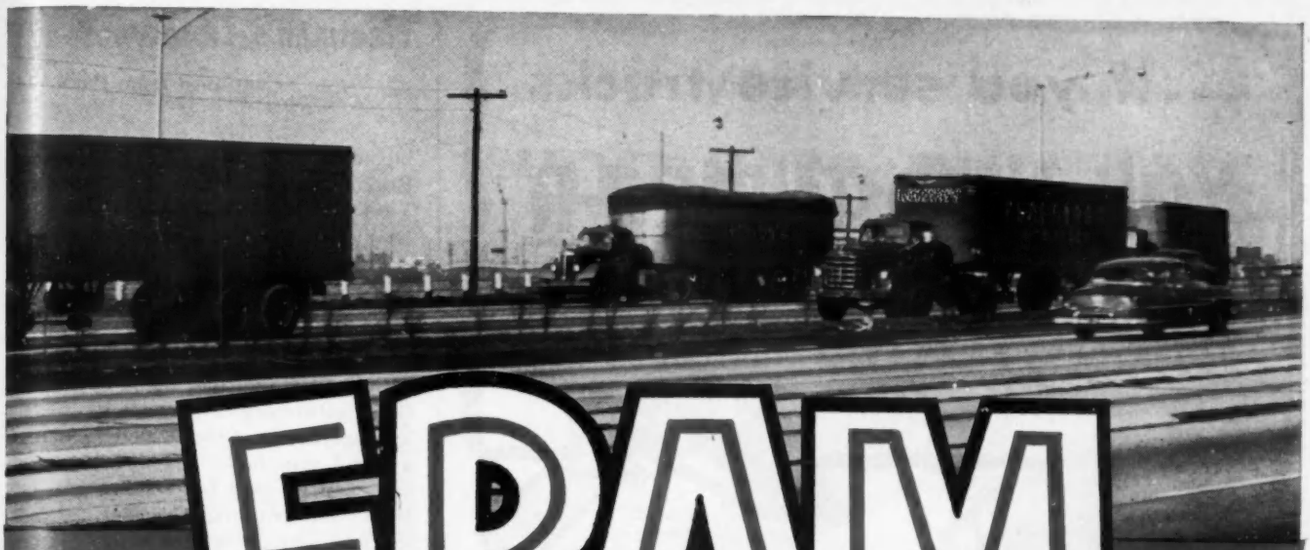
Truck Body Specialists with 22 years experience in the use of telescopic hoists

PENN BODY DIVISION HOCKENSMITH CORPORATION

PENN, PA. Call: Jeannette, Pa., LAfayette 3-5401 . . . Pittsburgh, Electric 1-1242

High Tensile Steel Van

Fruehauf Trailer Co. has announced a new volume van of all-welded, high tensile, corrugated steel in both full van and open top models. Vertical columns in the sides are formed by overlapping adjoining sheets and uniting them with double rows of welds from roof to floor. Wide stress sheets are located at the bottom of each side wall to reinforce the trailer structure from end to end. Front corners of the trailer have a 10-in. radius.



FRAM

BEATS BLOW-BY

FRAM Positive Crankcase Ventilator ejects corrosive blow-by gases at any engine speed

A FRAM Positive Crankcase Ventilator keeps your engine safe from excessive wear . . . loss of power . . . oil deterioration due to blow-by formed during cold weather, slow speeds and stop and go driving. It circulates clean, fresh air that carries off corrosive blow-by gases before they form engine-killing sludge and acids. And FRAM provides a steady flow of air regardless of engine or vehicle speed.

Get FRAM Positive Crankcase Ventilators for your engines—see the difference in power, performance and profit!

FRAM CUTS COSTS PER MILE!

FRAM
OIL • AIR • FUEL • WATER
FILTERS

FRAM CORPORATION
Providence 16, R.I.
Fram Canada Ltd.
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...if you service trucks

YOU NEED THESE I-R IMPACTOOLS

Size 5U Electric Impactool

Size 404 Air Impactool

No matter what the job . . . or how you've handled it before, you're in for a big surprise when you see how easily and quickly an I-R Air or Electric Impactool will do the work for you. It's a simple case of *quality* paying off in greater power and speed.

Six sizes of Air Impactools . . . four sizes of Electric Impactools . . . the best that money can buy. Mail the coupon for a free demonstration.

Size 34U Electric Impactool

Size 518 Air Impactool

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I'd like to see a demonstration of

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Impactools in our shop on our truck service jobs!

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COMPANY_____

ADDRESS_____

CITY_____ ZONE____ STATE_____

Fleetman's Library

Continued from Page 118

ing one, write Dept. A, American Brake Shoe Co., 230 Park Ave., New York 17, N. Y.

Body washing is the subject of this folder describing the properties and advantages of Oakite Composition No. 70. For a free copy, circle L 11 on the postcard on page 84.

Bulk flour unloader made by Fuller Co., a subsidiary of General American Transportation Corp., is covered in a new 4-page bulletin. It is a portable unit, can be used for loading into or from semi-trailers. Circle L 12 on the postcard for a free copy.

Standards for automotive service instruction in schools are outlined in this 80-page manual published by Automobile Manufacturers Assn. For a copy, write on your letterhead to AI-VE Conference on Public School Automotive Instruction, 320 New Center Bldg., Detroit 2, Mich.

Multi-stop delivery truck for dry freight in Divco's new Dividend Series is described in this new bulletin. This model has a 12-ft body, 470 cu ft of payload space. Circle L 13 on the postcard for a free copy of this bulletin.

Piston catalog just issued by Zollner Machine Works includes a complete listing of truck and bus engines showing piston diameter for various trucks by make, model and year. A cross index shows where to locate the factory duplicate piston. Circle L 14 on the postcard on page 84 for your free copy.

Radioactive material transportation regulations are given in this new government publication. Write the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C., for a copy. Price is 25¢ Ask for "Handbook of Federal Regulations Applying to Transportation of Radioactive Materials," Catalog No. Y3.At7:6T68.

Lubrication accessories, including control valves, adapters, fittings, hose and other shop lube equipment, is covered in the Gray Co.'s new catalog. Circle L 15 on the postcard for your free copy.

Alternators in both 6 and 12-volt, heavy-duty models are described in this new bulletin from Leece-Neville Co. Circle L 16 on the postcard on page 84 for your free copy.

END

Please Resume Reading Page 90

. . . New PM Goals for CTA

Continued from Page 73

of the average and maximum mileage figures.

Of equal importance is that 69,000 man-hour figure, which is so important to get down, so that the par set by the industry can be approached.

Even 10 Per Cent

Now, if it is felt that this goal is too much to ask for, let us look at figures based on only a ten per cent increase in miles over the average for the 13 units.

The total savings for the shops and garages would be:

1. 10,300 man-hours
2. $22,000 labor
   $30,000 material

Or, a grand total of $52,000 if only ten per cent improvement in mileage over the average were obtained for only 13 units.

These facts on the 13 items are presented to show that there must be a stimulus given to our supervisory personnel so that they may start with such fundamental ideas for a reason to do "Long Range Planning" for improved maintenance performance and deceased maintenance cost.

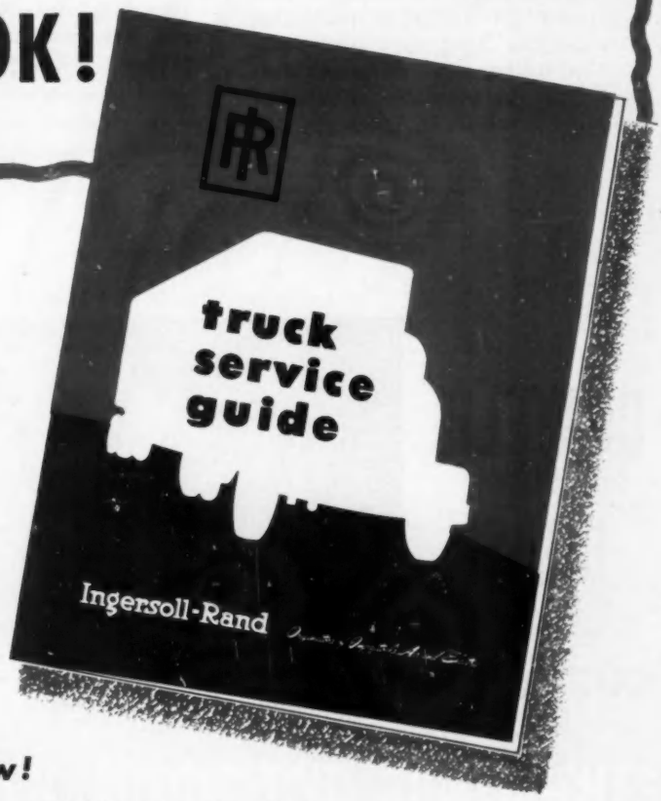
END

Please Resume Reading Page 74

"Whooey! What 'stupe' oiled this thing?"

. . . if you service trucks

YOU NEED THIS FREE BOOK!



It's new!

A 32-page guide showing actual time and money savings on typical service jobs using I-R Air or Electric Impactools.

See proof of the savings you can expect, when you equip your mechanics with dependable performing Ingersoll-Rand Impactools. The complete story is yours simply by sending us the coupon below or dropping us a line on your company letterhead.

18A-329

Ingersoll-Rand

11 BROADWAY, NEW YORK 4, N. Y.

Please send me a copy of your new "Truck Service Guide" that's just off the press!

NAME_____

COMPANY_____

ADDRESS_____

CITY_____ ZONE_____ STATE_____

New Product Descriptions

Continued from Page 86

have a single-face shatter-resistant red lucite lens and are available in a choice of single-face fender mounting, surface type, flush type and semi-flush mountings. As an added feature, lights are adaptable to combination directional signal, stop and tail lights.

P25. Metal Cleaner

Manufacturers Processing Co., Detroit, has introduced its new line of "Manpro" cold cleaners, said to be fast drying, non-toxic and non-flammable cleaners suitable to a variety of metal cleaning operations. For instance, this firm's No. 20 cleaner is said to be excellent for machinery wash-down, particularly electrical items because this cleaner is said to be a non-conductor. No. 21 has no flash or firepoint. No. 22 cleaner is said to include such advantages as low volatility and low dermatitis incident. No. 23 cold cleaner is reported as suitable for cleaning and degreasing of electric motors, generators, controllers, and other electrical components in closed circuits. No. 24 is stated to be particularly formulated for flushing, cleaning, and drying freon and gas refrigeration systems.

P26. Low Air Signal

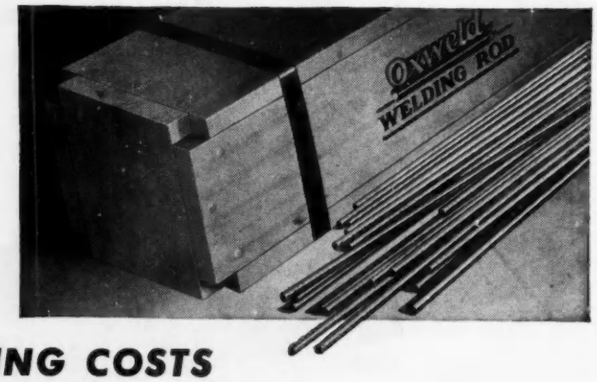
Berg Mfg. & Sales Co., Chicago, is introducing a new, low air pressure, automatic warning device, called "Signalaire." It gives the driver a visual warning, day or night when air pressure begins to drop. "Signalaire" operates through direct connection to the air line and operation is completely automatic and requires no adjusting or resetting. The signal automatically returns to "Safe" position when the pressure is restored. It complies with ICC Regulations No. 193.51. The warning signal appears on a Lucite bar with the word "Stop" in large, luminous letters coming into view and increasing in length as the pressure drops until a full signal indicates approximately 50 lb of pressure. A light bulb within the signal lights the bar.

P27. Sleeper Cab

International Harvester Co., Chicago, announces a new sleeper cab for International cab-over-engine truck models. Width of the berth has been increased to 24 in. by adding to cab length above the belt line, and a foam rubber mattress, 4 in. thick, is being furnished. A luggage compartment, accessible through a hinged

(TURN TO PAGE 124, PLEASE)

OXWELD
Trade-Mark
RODS



CUT WELDING COSTS

OXWELD rods are precisely engineered both chemically and mechanically to give only top performance in any welding shop. They help you to reduce welding costs because they permit you to:

USE LESS ROD PER WELD—OXWELD rods give high-strength welds with a minimum of reinforcement. Extra strength permits the use of less weld metal.

WELD FASTER—Highest quality ingredients in a rigidly controlled formula make welding with OXWELD rods easy and rapid. You save on gases and labor.

GET LOWER FINISHING COSTS—Welds made with OXWELD rods are uniform in quality, strength, and ductility; also easy to machine.

DECREASE ROD INVENTORIES—You need only five types of OXWELD rods to do all average welding and brazing. For specialized jobs, there are 9 more types . . . all available from one source of supply.

Ask your LINDE *jobber about* OXWELD *rods, fluxes and other welding accessories. Or write* LINDE AIR PRODUCTS COMPANY, *a Division of Union Carbide and Carbon Corporation, 30 East 42nd Street, New York 17, N. Y. In Canada: Union Carbide Canada Limited, Toronto.*

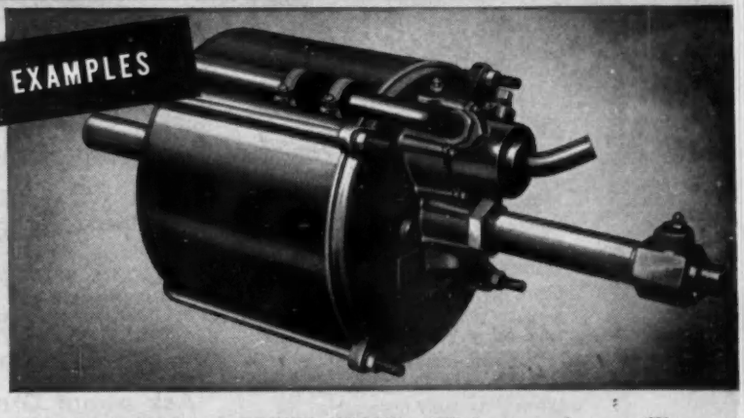
See your LINDE Jobber

The terms "Linde" and "Oxweld" are registered trade-marks of Union Carbide and Carbon Corporation.

Bendix Products Division

A GOOD RELIABLE SOURCE FOR AUTOMOTIVE COMPONENTS

TYPICAL EXAMPLES



ENDIX LINKAGE TYPE POWER STEERING—Because Bendix* ower Steering is of the linkage type, manufacturers find it pecially adaptable for production line installation without ex- nsive engineering changes. Manufacturers can now meet the er-increasing demand for power steering more efficiently and ore economically with Bendix Linkage Type Power Steering.

BENDIX HYDROVAC POWER BRAKE—With over four million in use, the Bendix Hydrovac* is the world's most widely used power brake for commercial vehicles. This overwhelming preference for Hydrovac is a result of sound engineering design, exceptional performance, low original cost and minimum service upkeep. Make the industry's choice your choice.

*REG. U. S. PAT. OFF.

RAKES • POWER STEERING • POWER BRAKING • CONSTANT VELOCITY UNIVERSAL JOINTS • HYDRAULIC REMOTE CONTROLS

BENDIX PRODUCTS DIVISION **SOUTH BEND** INDIANA

Bendix AVIATION CORPORATION

Export Sales: Bendix International Division, 205 East 42nd Street, New York 17, N. Y.

New Products

Continued from Page 122

back driver's seat, may be locked for safety. Increased cab length interferes in no way with the operation of a 35-ft trailer.

P28. Winch Hoist

The Lug-All Co., Haverford, Pa., offers a new lightweight 2-ton winch-hoist with 20 ft of cable. It lifts, lowers or pulls 2 tons a distance of 10 ft when used double cable or handles 1 ton a distance of 20 ft when used single cable. This new "Lug-All" weighs only 15 lb and includes main frame of aluminum alloys, oiled-for-life bearings, stainless steel springs, three workable hooks, and a built-in pulley that can be used as a "snatch block" in close quarter work.

P29. Lift Gate

Perfection Steel Body Co., Galion, Ohio, has a new hydraulically-operated end gate, rated at 2500 lb lifting capacity and suited for all trucks with capacities of 1½ tons and over, with maximum floor heights of 56 in. Unit is full hydraulic-operated from truck transmission PTO. Adjustable platform screw compensates for possible sagging and keeps platform level. End gate has a set of control levers on each side of the end gate, can be operated from either side of the truck.

P30. Paint Cups

Binks Mfg. Co., Chicago, announces a new graduated siphon cup for spray painting. Graduations are stamped into the cup, clearly visible on the inside and outside. The markings show fluid levels for ratios of 1-to-1, 2-to-1 and 3-to-1, as well as a mark for the one-quart level. The base of the cup's spun aluminum body is protected by a steel reinforced rim. The rolled top of the cup insures a good seal on the cover gasket and strengthens the top rim, according to the manufacturer. This new cup can be used with all makes of spray guns.

P31. Emergency Signals

Signal-Stat Corp., Brooklyn, N. Y., announces development of a system of signal lights which combine the functions of direction signals, tail lights, stop lights and flashing warning lights. The system mounts two lamps

(TURN TO PAGE 128, PLEASE)

GROTE CLEAR-VUE HEAVY DUTY TRUCK MIRROR

- Mirror head, 7" x 16", rimmed in stainless steel.
- Sturdy formed steel back, finished in black baked enamel.
- Entire mirror glass cushioned in rubber channel gasket...weather-tight, will not vibrate.
- High-quality, double-strength mirror glass...permanently silvered.
- Mirror glass easily replaceable.
- Assemblies available in single units or pairs.

What a mirror! Every important feature has been incorporated in Grote's new "West-Coast" styled Clear-Vue. Plus such special Grote extras as simple installation and adjustment . . . easy parts replacement! Brackets and arms are shipped completely assembled. With no loose small parts, you save work, time and trouble.

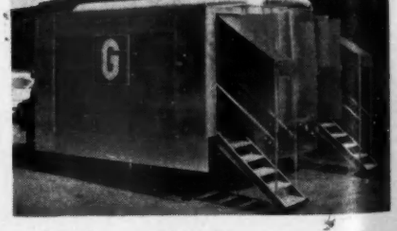
Ask about Grote's "Inventory-Saving" Plan!

For a full view of safety and economy, look into the Grote Clear-Vue and the complete Grote Mirror line. See your Jobber today, or write for catalog and prices.

Lamps • Directional Signals • Reflectors • Flares • Mirrors

THE GROTE MANUFACTURING CO., INC., Bellevue, Ky. • Opposite Cincinnati

Doubles Its Width



At the touch of a button, floor space in this expandable display body doubles, gives a room 16 ft wide, 7 ft high. Made in three models by Gardner Displays, Pittsburgh, Pa., it can be had in 16 and 22-ft body lengths mounted on a COE Dodge 19,500-lb GVW chassis or as a 32-ft semi-trailer constructed on a Fruehauf chassis. It has its own 3500 watt generating plant for operation of standard 110 volt lights and other electrical equipment. Also, it can be plugged into an outside current source. An exit and an entrance are provided equipped with stairs and handrails. Exhibit materials or other equipment can be loaded through rear cargo door.

on why so many big fleets

Blackhawk Jacks

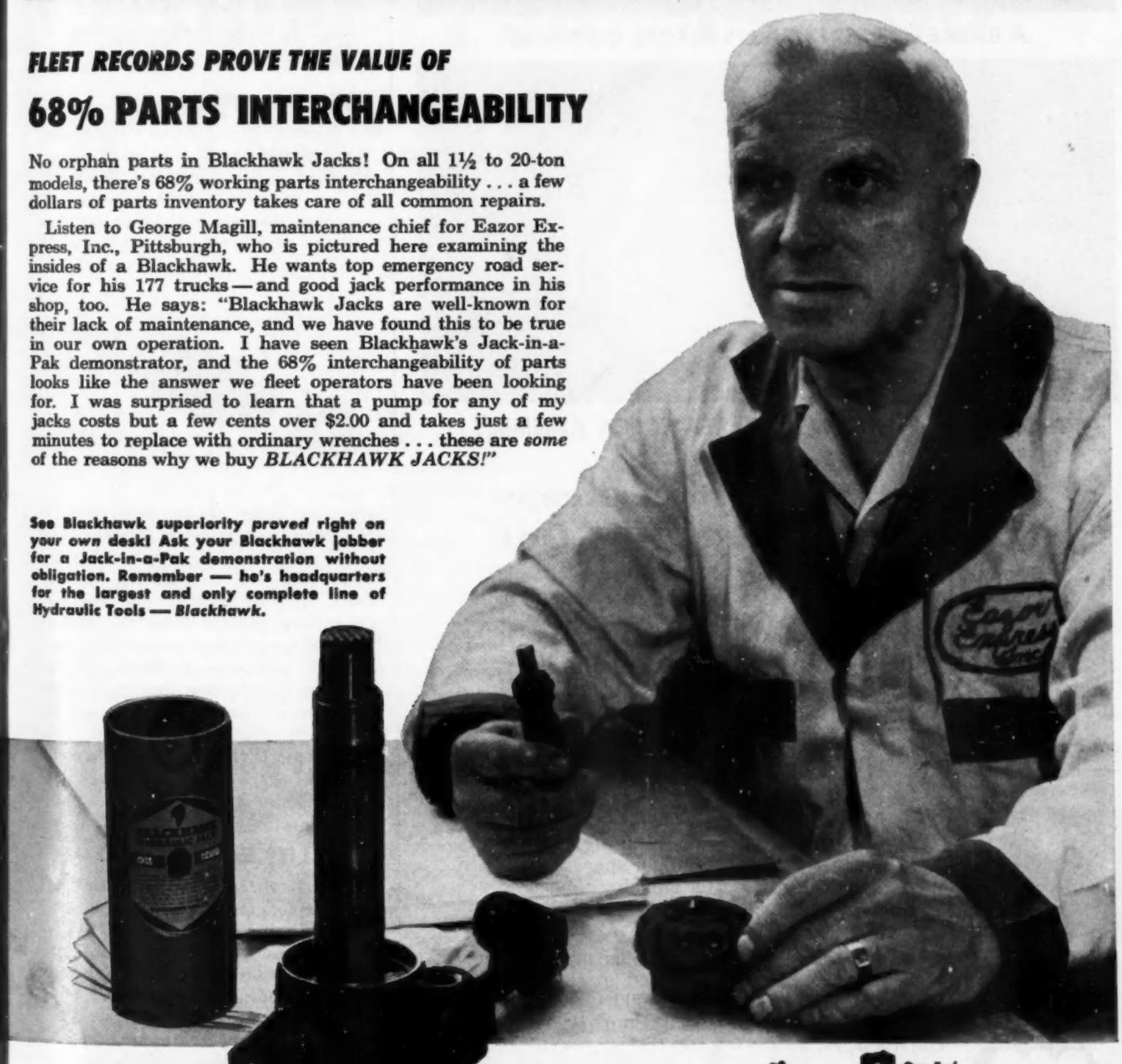
FLEET RECORDS PROVE THE VALUE OF

68% PARTS INTERCHANGEABILITY

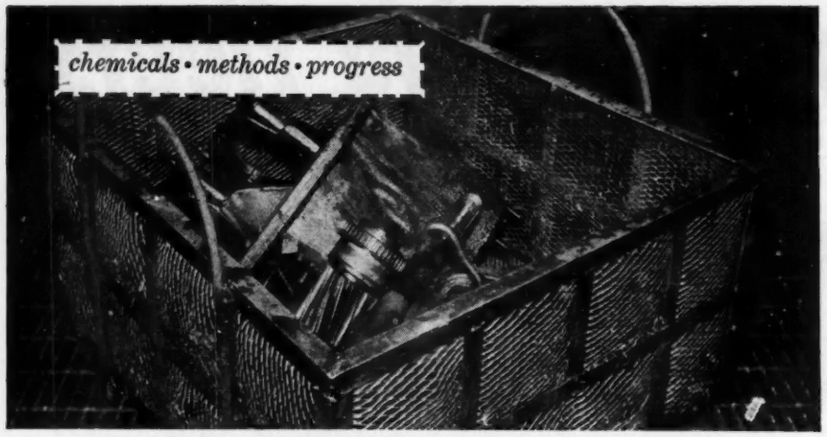
No orphan parts in Blackhawk Jacks! On all 1½ to 20-ton models, there's 68% working parts interchangeability . . . a few dollars of parts inventory takes care of all common repairs.

Listen to George Magill, maintenance chief for Eazor Express, Inc., Pittsburgh, who is pictured here examining the insides of a Blackhawk. He wants top emergency road service for his 177 trucks — and good jack performance in his shop, too. He says: "Blackhawk Jacks are well-known for their lack of maintenance, and we have found this to be true in our own operation. I have seen Blackhawk's Jack-in-a-Pak demonstrator, and the 68% interchangeability of parts looks like the answer we fleet operators have been looking for. I was surprised to learn that a pump for any of my jacks costs but a few cents over $2.00 and takes just a few minutes to replace with ordinary wrenches . . . these are *some* of the reasons why we buy *BLACKHAWK JACKS!*"

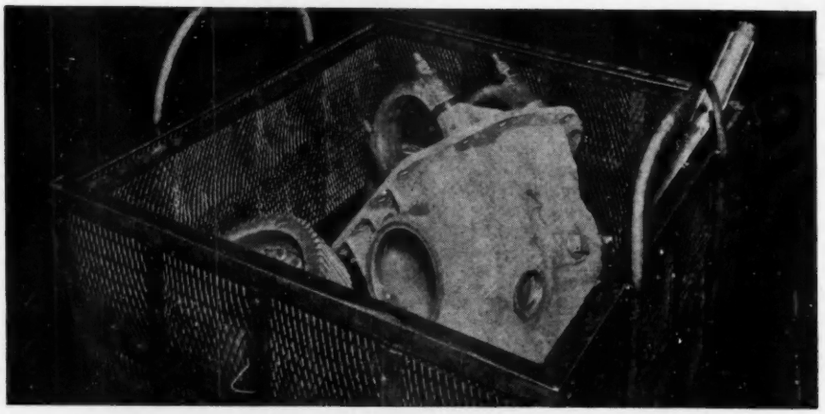
See Blackhawk superiority *proved* right on *your own* desk! Ask your Blackhawk jobber for a Jack-in-a-Pak demonstration without obligation. Remember — he's headquarters for the largest and only complete line of Hydraulic Tools — *Blackhawk.*



MANUFACTURER OF TOOLS



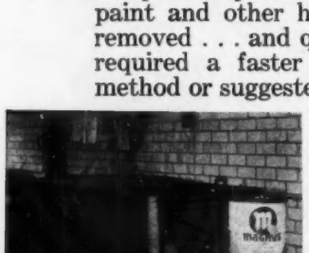
A BASKET OF DIRTY PARTS BEFORE CLEANING



THE PARTS AFTER CLEANING, READY FOR ASSEMBLY

New Cleaning Method Keeps 1,000 Unit Fleet on the Go!

The Motor Repair Department of a midwest 1,000 unit fleet encountered problems in cleaning diesel engines, transmissions, air compressors and a great number of component parts. Soil, grease, carbon, road dirt, old paint and other hard to get off materials had to be removed . . . and quickly. The solution to this problem required a faster and better method than the old method or suggested method of using hot dip tanks.



The combination of Magnus mechanical agitated cleaning equipment and Magnus cleaners combined to:

1. Speed up the cleaning.
2. Require less floor space.
3. Do a better cleaning job.
4. Greatly reduce overall cleaning costs.

This and other efficient methods are completely outlined and illustrated in the new 36 page Magnus Bulletin 10,000 G. Copies are available from Magnus, 38 South Avenue, Garwood, N. J.

magnus

AUTOMOTIVE DIVISION

MAGNUS CHEMICAL CO., INC.

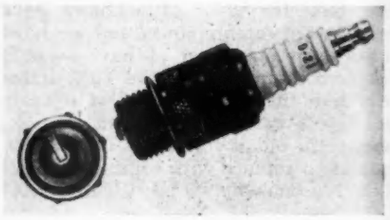
New Products

Continued from Page 124

at the front of the vehicle and two at the rear. Control is by lever mounted on the steering post. In normal operation, rear lights serve as standard, though brighter than normal, tail and stop lights. They and the double-faced amber lights at the front flash in conventional manner to signal turns. Should the truck become disabled, the driver merely moves a wing lever on the control arm; immediately, all four lights flash an unmistakable intermittent warning.

P32. Spark Plug

Champion Spark Plug Co., Toledo, Ohio, announces a new spark plug. The new model, designated the D-21, utilizes the turbo-action principle of extreme clearance volume at the firing end of the plug to provide additional fouling resistance and wider



operating range. It has been adopted as original equipment in Checker taxicabs, and is used in certain refrigeration and air conditioning power units, air compressors and electric generating engines fitted for 18mm spark plugs. Champion engineers say the D-21 is especially effective where stop and go operation, long periods of idling, or running at constant speeds encourage deposit build-up on the spark plug. It is installed with a conventional spark plug gasket, does not use a tapered seat.

P33. Lift Gate

Hercules Steel Products Co., Galion, Ohio, announces a new 1100-lb capacity "Load-N-Gate" power-lift tailgate for use with pick-up, stake or platform bodies on ½, ¾ and 1 ton trucks. Known as the Model No. H-11 series, the new gates are designed for use by contractors, building supply dealers, manufacturers, maintenance departments, public utilities, vending machine distributors, appliance dealers, jobbers, equipment distributors, retail stores and others.

(TURN TO PAGE 130, PLEASE)

Is Your Truck Refrigeration Costing You $14,000 a Year-Too Much?

All-electric truck refrigeration powered by General Electric can save you money. For example, a large midwestern dairy recently reported a savings of $14,000 per year in the elimination of ice by switching to trucks using all-electric refrigeration. Thousands of dollars annually have also been saved with the reduction of spoilage and returns. And check these other ways you benefit with all-electric truck refrigeration: dry-cold, stand-by and in-transit cooling, more space for payload, lightweight, uniform temperatures, quiet operation, below freezing cooling for frozen foods, a rating for every size truck.

TO LEARN MORE ABOUT THESE BENEFITS of all-electric truck refrigeration powered by General Electric, contact your local G-E Apparatus Sales Office. And *make sure* you receive G.E.'s new bulletin on all-electric truck refrigeration by sending the coupon at the right. General Electric Co., Schenectady, New York.

Progress Is Our Most Important Product

GENERAL ELECTRIC

ELECTRICAL COMPONENTS FOR TRUCK REFRIGERATION SYSTEMS

ACT NOW!
Send for FREE bulletin

Section A704-74
General Electric Company
Schenectady 5, New York

Please send me your new bulletin GEA-6084-B describing the benefits of all-electric truck refrigeration powered by General Electric.

Name_____

Company_____

Street_____

City_____ Zone_____ State_____

New Products

Continued from Page 128

P34. Tire Signal

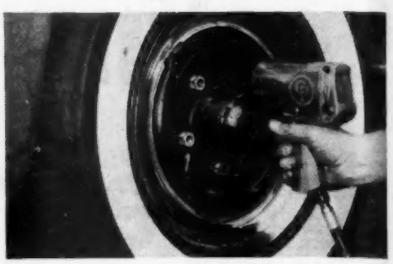
Carlan Instruments Co., Cranston, R. I., announces development of a device that automatically notifies the driver of a vehicle, by means of an electric flasher mounted on the dashboard, of the loss of air in any one of the tires on his vehicle. Constantly flashing light warns the driver and enables him to stop and remedy the fault at the next service station or garage.

P35. Voltage Regulators

Arrow Armatures Co., Boston, Mass., has added a line of completely new (not rebuilt) voltage regulators. One-piece base eliminates the need for brackets or adaptors because each regulator is made as a replacement for original equipment regulators. Precious-metal contact points and a voltage limiter are said to provide longer life and minimum voltage change. The voltage limiter has a special compensating resistor to deliver instant response to temperature changes. Improved coil is designed to reduce voltage drop within the regulator.

P36. Air Impact Wrench

Chicago Pneumatic Tool Co., Chicago, has added a ½-in. square drive air model to its line of impact wrenches. It provides an air-operated



reversible impact wrench for handling jobs where ½-in. square drive sockets would normally be used. It has a clamp-on, attachable angle head feature that makes the angle head an integral part of the wrench. Torque can be reduced to run a series of small screws or large nuts to uniform tightness.

P37. Saddle Tanks

Master Tank & Welding, Dallas, Texas, announces addition of semi-oval saddle tanks to its line of fuel tanks for trucks and tractors. Tanks are designed to give increased fuel capacity without increasing the amount of space required, do not require special brackets for installation but can be bolted directly to the truck frame. Tanks have an overlapping head which places the weld a full inch from the point where the head of the tank starts to curve. Semi-oval saddle tanks are manufactured in 110 and 135 gal capacities and are spaced 37½ in. apart.

P38. Timing Light

Schauer Mfg. Corp., Cincinnati, Ohio, is now producing a new automotive engine timing light. It is designed to be slim and long, does tests for ignition timing, governor action, distributor condition, etc., on cars, trucks and other vehicles having 6, 12 or 24-volt systems. The new timing light is 10⅞ in. long, weighs only 7 oz, operates from 115-volt AC power source. Tough, durable plastic case will take plenty of hard knocks.

END

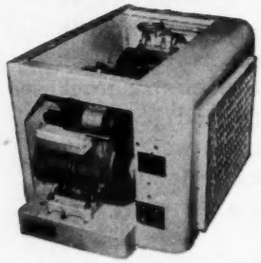
Please Resume Reading Page 88

Reefer Payloads Like This / Safeguarded by WISCONSIN-POWERED THERMO-KING *Automatic Refrigeration*

Thermo-King Truck Refrigeration Units, made by U. S. Thermo Control Co., Minneapolis, Minn., are noted for economical, automatically controlled refrigeration of the utmost dependability. And because the power unit must necessarily carry the burden of the operating load, it is of vital importance that the engine be of heavy-duty design and construction... to fit both the equipment and the work it is to do.

Wisconsin Heavy-Duty Air-Cooled Engines measure up to the exacting demands of this type of service. The Thermo-King North Star Series units, illustrated here, are powered by a Model AEND single cylinder Wisconsin Engine, distinguished by such heavy-duty features as: tapered roller bearings at *both* ends of the drop-forged crankshaft; Stellite-faced exhaust valves and solid Stellite valve seat inserts; positive type valve rotators; rotary type high tension *outside* magneto; 4-ring aluminum alloy piston; 6-shoe, dual ball-bearing-mounted centrifugal clutch; oil bath cleaner, 6-volt starter and many other features that stand for long engine life, efficient operation and low-cost maintenance.

You can't do better than to specify "Wisconsin Power" for *your* truck refrigeration equipment.



This dual-powered Thermo-King unit is operated by its Wisconsin Engine on the road and plugs into electric power at the dock. The unit mounts in an 18-inch space, over the truck cab.

This is the model AEND 4-cycle single cylinder Wisconsin Heavy-Duty Air-Cooled Engine that furnishes dependable power on the road.

WISCONSIN MOTOR CORPORATION
World's Largest Builders of Heavy-Duty Air-Cooled Engines
MILWAUKEE 46, WISCONSIN

ADC* REPORT

LOUISVILLE TRANSIT COMPANY, LOUISVILLE, KENTUCKY

adopts Shell ADC Oilprint Analysis as major oil change yardstick . . .

uses it for faster, surer Preventive Maintenance

LOUISVILLE TRANSIT COMPANY, noted for its preventive maintenance record, has adopted the ADC Oilprint Analysis. Result: reduced PM time and outstanding economy in labor and parts.

The ADC Oilprint Analysis enables fleet operators to test the condition of crankcase oil in the short time allotted for re-fueling and crankcase oil checks . . . a dependable evaluation in *minutes*. It answers the question "When do I change my oil?", thus eliminating the draining of usable oil and the risk of using oils loaded with contaminants.

ADC Oilprint Analysis can take an active part in your PM program. Let us demonstrate how it can effect savings for your fleet. *Trademark

SHELL OIL COMPANY

50 WEST 50th STREET, NEW YORK 20, NEW YORK
100 BUSH STREET, SAN FRANCISCO 6, CALIFORNIA

SHELL

. . . The Long Range Future

Continued from Page 83

tions in this report have been scaled down as compared to the 1953 forecasts.

Piggy-Back

Professor Barloon notes there are many potential economies in piggy-back operation not yet in operation. He cites the possibility of side loading and unloading as a means of providing piggy-back service to intermediate points without today's present switching delays caused by end-loading.

However, he further notes that piggy-back is not likely to increase the number of trailers in service. Piggy-back rates, he comments, are not likely to be sufficiently low to take any appreciable business away from box car movement (Oct. '55, page 68). Says Barloon, "Therefore, whatever trailer traffic the truckers switch to flatcars will merely displace trailer traffic which otherwise would have moved over the road anyway. But this kind of switch will not increase the number of trailers in service."

Annual Fluctuations

There can be deviations from the specific annual figures cited in the predictions. These deviations should cancel each other out so that the ten-year trend coincides with the forecast with, of course, due regard for the limitations cited.

Professor Barloon notes, for example, the temporary impact of new trailer developments or changes in state laws. Such events could expand trailer replacement in excess of the amount forecast. However, he warns, this kind of replacement results in a disproportionate number of newer trailers in service and a resulting decline in normal replacement after the impact of the changes has passed.

END

Please Resume Reading Page 84

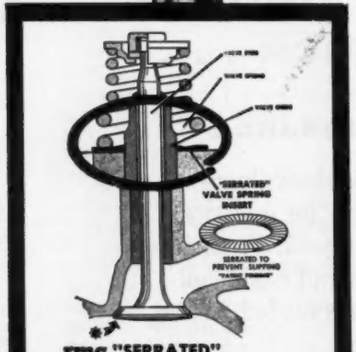
Engineered & Built to Take the High Compression Gaff!

"Original Engine Engineered"

VALVES

Today's Shorter Strokes, larger bores, and higher compressions are rough on valves—tend to shorten valve life.

rmc, two piecevalves featuring Austenitic steel heads, stellite faces, and heat bands, where required, are engineered and built to stand the gaff—giving better performance and greater mileage.



rmc "SERRATED" VALVE SPRING INSERTS

A must for every valve grind job, compensates for torsion relax and restores Spring tension. Recommended by Car and Truck manufacturers.

Specify rmc Parts

Valve guides and seats

Valve Springs and locks

Sold by leading Automotive Parts Jobbers

WAREHOUSED IN ALL PRINCIPAL CITIES

RICH MANUFACTURING
BATTLE CREEK
MICH., U.S.A.

BASIC VALVE MANUFACTURER FOR ORIGINAL EQUIPMENT SINCE 1908

High Voltage Fleets

Continued from Page 71

tions value of good looking vehicles, the utility companies pay careful attention to appearance maintenance. Shops are usually well equipped, often build and service the specialized equipment as well as the vehicles.

These electric utility fleetmen join forces with gas utility fleet operators to discuss maintenance and equipment problems at regular meetings of the American Gas Assn.-Edison Electric Institute.

END

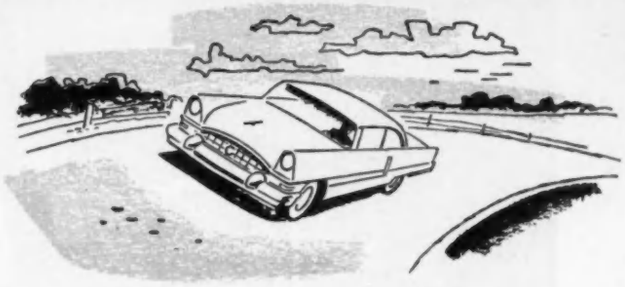
Please Resume Reading Page 72

THERE !

endurance, speed and economy test... to establish new world's records!

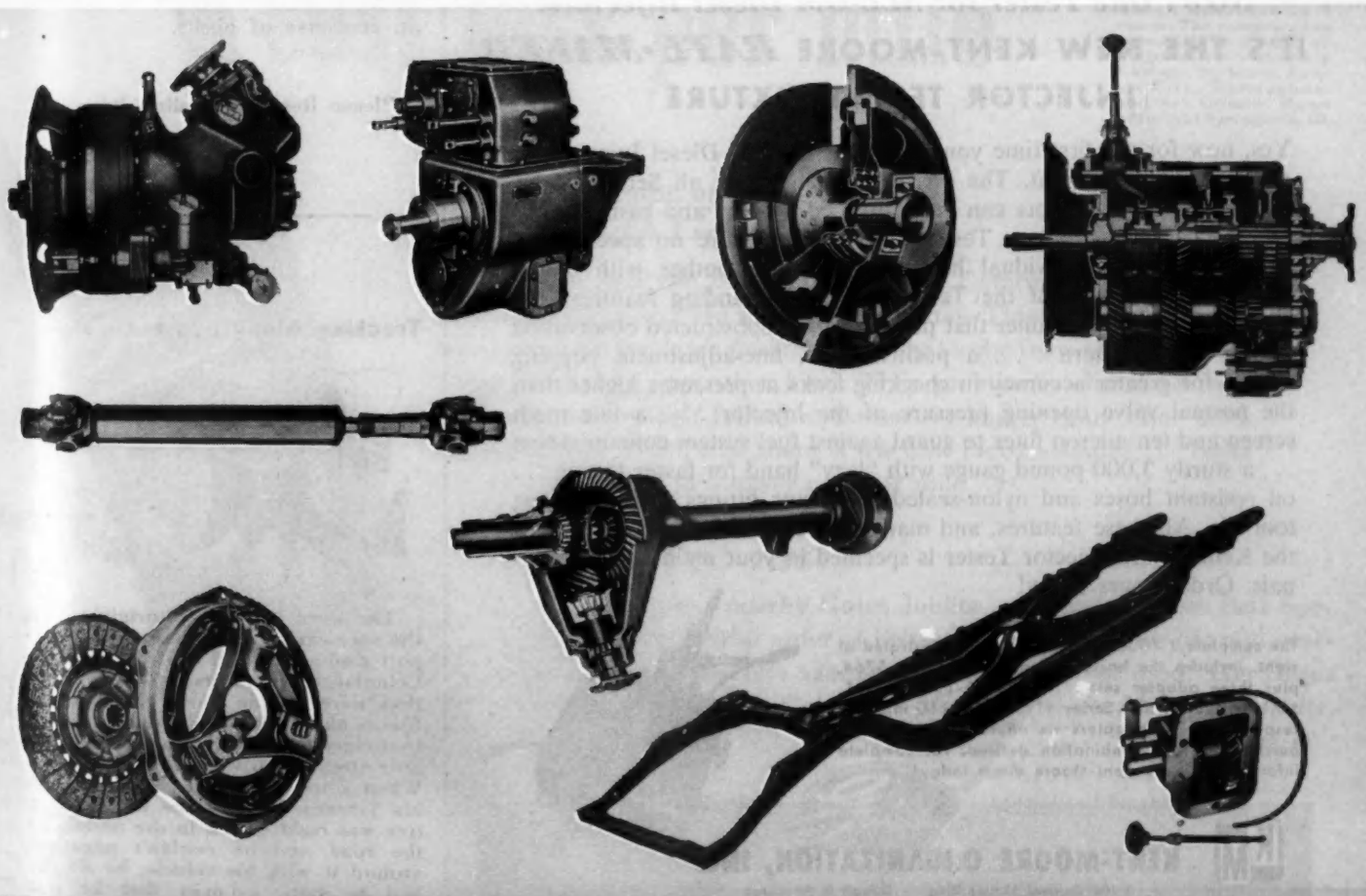
Pike's Peak Climb

New world record set September 9, 1955, by Zora Arkus-Duntov driving a 1956 Chevrolet. Time 17 minutes, 24.05 seconds.



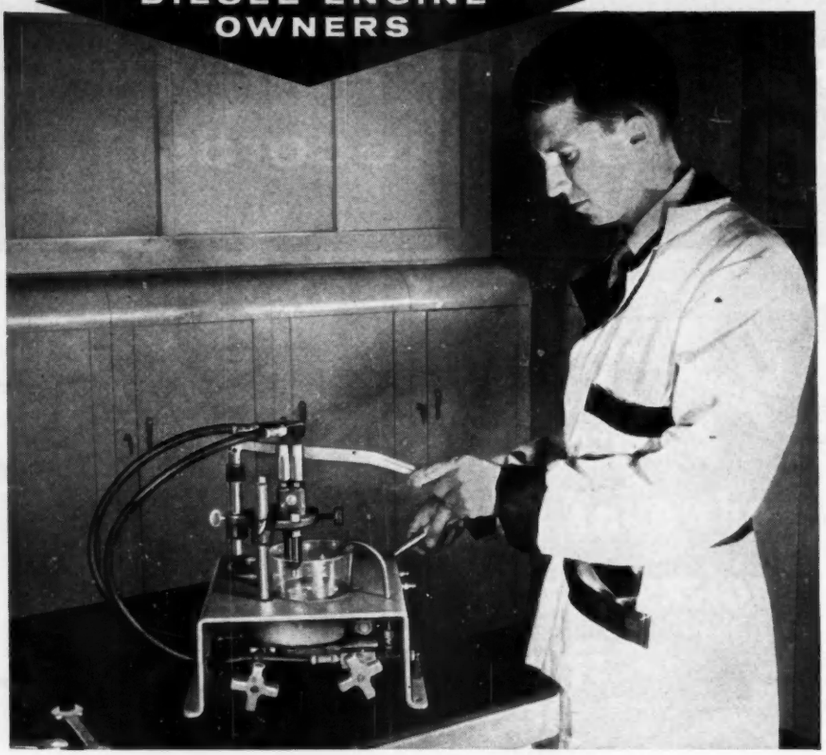
Durability Run

25,000-Mile Durability Run in 238.77 hours total elapsed time for an average speed of 104.7 MPH established by a Packard Patrician.



SPICER PRODUCTS: TRANSMISSIONS • UNIVERSAL JOINTS • PROPELLER SHAFTS • AXLES • TORQUE CONVERTERS • GEAR BOXES • POWER TAKE-OFFS POWER TAKE-OFF JOINTS • RAIL CAR DRIVES • RAILWAY GENERATOR DRIVES • STAMPINGS • SPICER and AUBURN CLUTCHES • PARISH FRAMES • SPICER FRAMES

GM
DIESEL ENGINE
OWNERS



NOW! One Tester for ALL GM Diesel Injectors!

IT'S THE NEW KENT-MOORE *RATE-MAKER*, INJECTOR TESTER FIXTURE

Yes, now for the first time you can check *all* GM Diesel Injectors on *one* tester! That's right. The six tests specified for all Series 51, 71 and 110 engine injectors can be performed quickly and easily on the new Kent-Moore Injector Tester . . . and there are no special conversion units or individual holding fixtures to bother with either! Consider, too, some of the Tester's other outstanding features . . . a clear view plastic container that permits safe, unobstructed observation of the spray pattern . . . a positive lock, fine-adjustment popping handle for greater accuracy in checking leaks at pressures higher than the normal valve opening pressure of the injector . . . a fine mesh screen and ten-micron filter to guard against fuel system contamination . . . a sturdy 3,000 pound gauge with "lazy" hand for faster testing . . . oil resistant hoses and nylon-sealed connector fittings to insure long tool life. All these features, and many more, make it easy to see why the Kent-Moore Injector Tester is specified in your maintenance manuals. Order yours today!

The complete J 7000 Injector Tester, as illustrated at right, includes the basic testing instrument, J 5764, plus three adapter sets . . . J 7051-1, J 7071-1, J 7110-1 for testing Series 51, 71 and 110 injectors respectively. The adapters are offered separately for purchase in any combination desired. For complete information, write Kent-Moore direct today!

KM® **KENT-MOORE ORGANIZATION, INC.**
5-105 General Motors Bldg. • Detroit 2, Michigan
ENGINEERS AND MANUFACTURERS OF SPECIAL AUTOMOTIVE SERVICE TOOLS AND EQUIPMENT

Chevrolet's '56 Line

Continued from Page 91

ton models, and improved coil spring clutches with multi-spring design are standard with all truck V-8 engines.

Higher Horsepower

Chevrolet offers a total of nine engines this year including four V-8's and five 6's. The Trademaster and the Taskmaster, the two truck V-8's, rate at 155 hp, 10 more than in 1955. Though it has the same horsepower rating as the Trademaster, the Taskmaster is equipped with valve rotators, full chrome top compression rings and positive crankcase ventilation.

When used with a "power package" in the sedan delivery, the passenger car Turbo-Fire V-8 turns out 205 hp. The three versions of the Thriftmaster "6," though differing in some components, all generate 140 hp, 17 more than in 1955. The improved Jobmaster "6" has a 148 hp rating, an increase of eight.

END

Please Resume Reading Page 92

Trucking Along . . . By Bess Ritter

The word "stumped" originated in the very early days of American transportation and meant exactly that. Our Colonial truckers had to use roads that were simple paths through the forest, and road building was a sort of spontaneous operation because it was only attended to when the need arose. When a trucker couldn't continue on his journey because the stump of a tree was right smack in the middle of the road and he couldn't negotiate around it with his vehicle, he simply had to stop, admit that he was "stumped," and make immediate plans for removing the obstacle.

16 million miles a year prove Gates 'T' Belts cost less per mile

Bill Royston, Superintendent of Maintenance for Campbell 66 Express, which operates in 9 states. The company has terminals in dozens of major cities including Chicago, St. Louis, Kansas City, Birmingham and New Orleans. Home office is at Springfield, Ill.

Look for this "T"*

It is your assurance of the belt *specially engineered* for trucks and buses—the belt with a *tough*, flexible cover and cords of *extra* high tensile strength.

*Reg. U.S. Pat. Office

Bill Royston, Supt. of Maintenance for Campbell 66 Express, Inc., says:—

"Last year the 236 road tractors of Campbell Sixty-Six Express covered 16,151,715 miles in nine states. This type of extensive operation calls for *dependability*—and that's the reason we use more Gates Belts than any other kind. They practically eliminate road delays because of belt failure and wear far longer than other belts we have tried. Then, too, there is the cost factor—Gates 'T' Belts actually figure out to a lower cost per mile."

Make this test:

Call your nearby Gates Jobber and have a Gates Belt Specialist deliver a trial order of belts. Match the service life and cost-per-mile of these belts against any you have ever used. The Gates Rubber Co., Denver, Colorado—*World's Largest Maker of V-Belts.*

TPA-66

The mark of Gates *specialized research*

GATES TRUCK & BUS V-BELTS

Grandview Dairy Calls on the Experts

Continued from Page 77

In the same way jobbers have been able to replace brake lining and make proper adjustments almost as cheaply as Grandview's shop could do it if properly equipped. As a result only brake adjustments are made in the shop.

No Night Mechanic

Step No. 6. Eliminating a night mechanic. A study of the maintenance program showed that a night mechanic was not able to work efficiently due to the limitations of help and supervision. But since the trucks were operating throughout the night it was necessary to have equipment available when required. The answer was the setting up of a spare route truck ready to put into the field in the event of failure of regular equipment. This has eliminated the need of a night mechanic, and since a spare truck can be used during the day, the change resulted in a substantial saving.

Step No. 7. Streamlining of records. The cost of keeping a comprehensive set of records was becoming prohibitive, in view of the limitations that hindered ideal maintenance anyway. Since cost per mile is not as important to a private carrier, where profits are made on the main business, the company decided to eliminate many of the cost studies and operational forms that were taking too much clerical help. Now only the simplest of forms are kept to show:

a. When equipment is to be serviced.

b. Gas and oil.

c. Road failures.

The preceding discussion should not be construed to convey that maintenance at Grandview is slighted in the least. In fact, the company feels that by farming out routine jobs, more attention can be paid to such important factors as operating economy.

END

Please Resume Reading Page 78

"Would you mind wearing this when you walk through the shop? It takes the boys too long to recover!"

UNDER AND OVER INFLATION WRECK ONE TIRE OUT OF EVERY 6

Improper inflation of tires can rob you—because it shortens tire life, wastes useful mileage, raises fleet cost-per-mile unnecessarily. Unnecessarily—because ECO tireflators give you constant, accurate delivery of desired pressures to insure all-around proper tire inflation at any pressure from 5 to 110 pounds. Economically, too, because in most cases, first cost of an ECO tireflator is its last cost. Ask your John Wood Representative for details about ECO remote tireflators and ECO islanders for tire-saving control of inflation pressures.

MODEL 97 ECO tireflator for mounting on wall, pillar or post. Fits anywhere to save your time and money.

JOHN WOOD

JOHN WOOD COMPANY

BENNETT PUMP DIVISION Muskegon, Michigan

In Canada: Toronto • Montreal • Winnipeg • Vancouver

IT'S NEW... IT'S LIGHT IN WEIGHT ...IT'S RUGGED CAST STEEL!

the Simplex 5th wheel

AND IT'S BUILT FOR AN EXTRA MARGIN OF SAFETY

Looking for a way to get a "bonus" on 5th wheel performance? You *can*—when you specify the new Simplex 5th Wheel. Here's a wheel that carries the heaviest loads permitted on highways... carries them safely, smoothly... at lower costs per mile!

And, note the many features of this new wheel ... most not available on other wheels *regardless* of weight! Then consider the fact that Simplex Wheels have been subjected to thousands of miles of road testing... and have earned the high praise of users.

If *you* are looking for new ways to maintain high safety margins—and yet reduce dead weight on your tractors—find out more about the new Simplex Wheel.

Write today to
Simplex 5th Wheel,
Hohman Ave. and Hoffman St.,
Hammond, Indiana

A FEW OF THE MANY FEATURES OF THE NEW SIMPLEX WHEEL

Rugged cast-steel plate—webbed and reinforced for maximum strength.

Cushioned rocker arm—your payload rides on rubber.

You *know* the wheel is locked—by a quick glance at operating handle.

Forged steel jaw—greater bearing area, longer king-pin life.

All locking parts are positively interlocked—for maximum safety.

Easy to unlock—*from the side*—with just one hand!

See all of these features illustrated—and many more. Write for free copy of new Catalog that completely describes the construction and operation of the Simplex 5th Wheel!

Simplex 5th wheels

More Miles from Your Maintenance Dollar

Continued from Page 81

izes water temperature and reduces fuel consumption by three to 10 per cent. He explained that even a three per cent savings in fuel could amount to $1,200 in the service life of a bus.

H. A. Reynolds, Harrison Radiator Division, General Motors Corp., reported that while present fans are satisfactory at speeds above 20 miles an hour, they are otherwise marginal, too noisy and absorb too much power. He estimated the power loss caused by fans as 10 to 15 per cent of total power developed, and proposed the use of variable blade pitch fans in which the engine-to-fan speed ratio is increased as engine speed decreases.

No Fan Belt

Engineering difficulties involved in designing and building satisfactory fans were outlined by R. W. Wantin, Ford Motor Co. He recommended development of light, compact fans driven by air, electricity or hydraulic fluid which would operate easily and quietly and would not only maintain engine temperatures at desired levels, but absorb far less horsepower. Wantin reported that an experimental run of 2183 miles with a thermostatically-controlled fan on a heavy truck indicated that while the engine was operating 67 hours, the fan was needed in operation only 41 hours.

In the informal discussion following the panel, L. W. Child, Detroit Testing Laboratory, Inc., reported that tests with Detroit Street Railway buses using variable pitch fans resulted in far less engine sludging than with any other type fan or any type of radiator shutter. He acknowledged

(TURN TO PAGE 142, PLEASE)

Your Customers Get MORE from P&D COILS!

More for your customers means more for you. For instance, P & D Super Power Coils are designed and Engineered

- For Modern High Compression Engines
- For Highest Performance and Durability
- For Easier Starting
- To Deliver More Power
- To Save Fuel

YOUR CUSTOMERS DESERVE THE BEST. SELL THEM P & D COILS AND OTHER P & D PRODUCTS AND WATCH YOUR BUSINESS GROW.

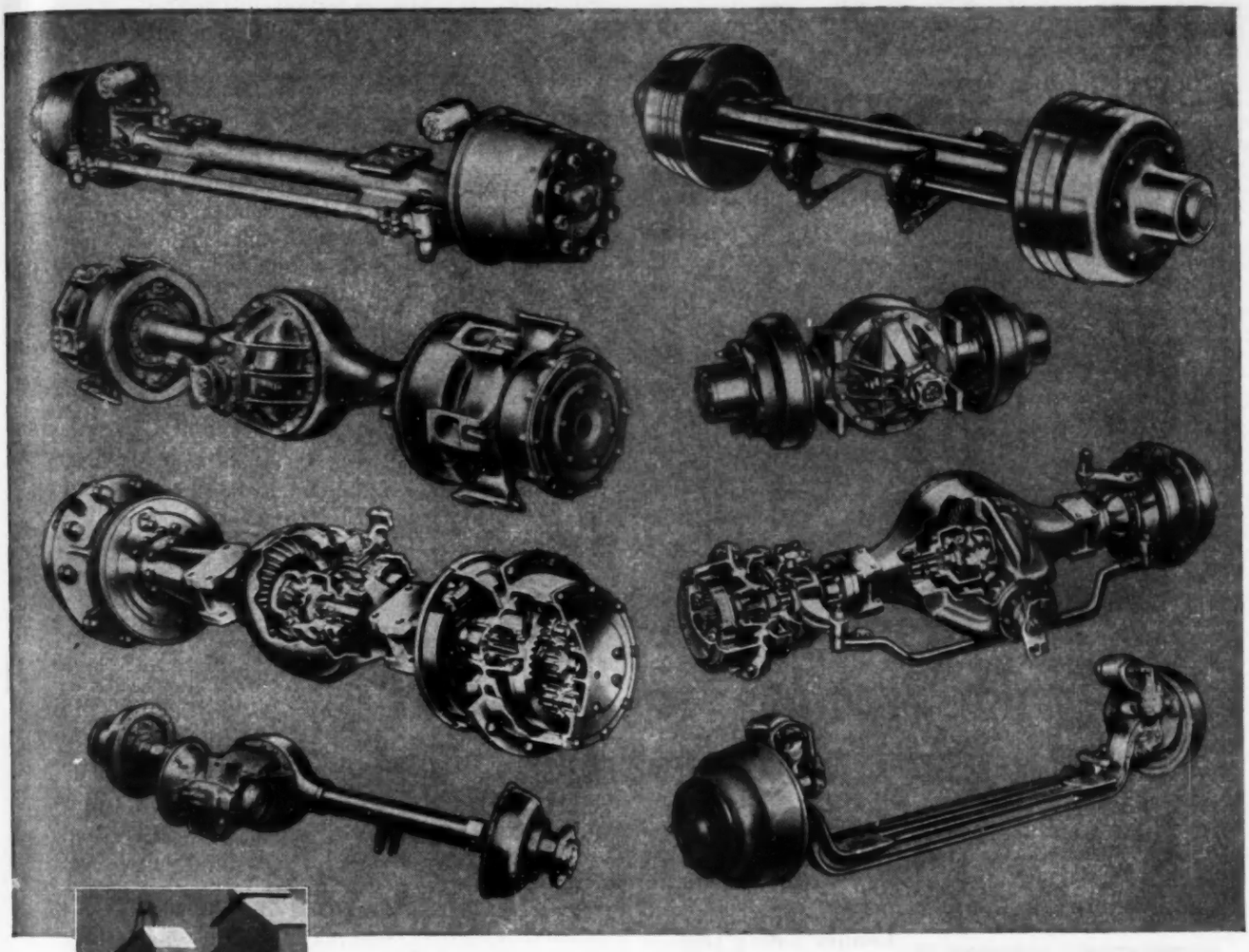
HAVE YOU A P & D CATALOG?

GENUINE P&D PARTS

MANUFACTURING CO., INC.
Established 1920
19-02 Steinway Street, Long Island City 5, N. Y.

Trucking Along . . . By Bess Ritter

Although many modern trucks carry advertising on their sides, the idea isn't new. As a matter of fact it was far more prevalent in France a few hundred years ago when metal signs, which were usually 3 x 5 ft in size, were tacked to the sides and backs of stage coaches and freight trucks. They looked very much like the kind that you can see in modern subways, trolleys and buses, and the revenue they earned was of considerable importance to the old time truck owners, since many might not have broken even at the year's end if it weren't for these metal placards.



A flattering thing to say for *any* working vehicle

CLARK AXLES!

Champions, they say—athletes or revenue vehicles—are as young as their legs; which explains quickly why Clark-equipped vehicles grow old profitably——their "legs" stay young.

Clark builds axles for every type of commercial vehicle

- ***trucks and buses*—rugged, easy-to-steer front axles; driving axles, steering and non-steering**
- ***trailers*—light, rigid, tough axles of high carbon steel tubing; spindles forged integral**
- ***off-highway vehicles*—specially designed heavy-duty drive axles, steering and non-steering, for industrial machines; axle-transmission drive units for agricultural and industrial applications**
- ***fork-lift trucks*—axles designed for materials handling equipment**
- ***housing*—light, exceedingly strong, one-piece forging, heat-treated**

What is your need in that vital area of "durable legs?" In Clark axles you get the solid cash benefits of 50 years concentration on transmitting horsepower to wheels: efficiently, economically, durably.

CLARK® EQUIPMENT

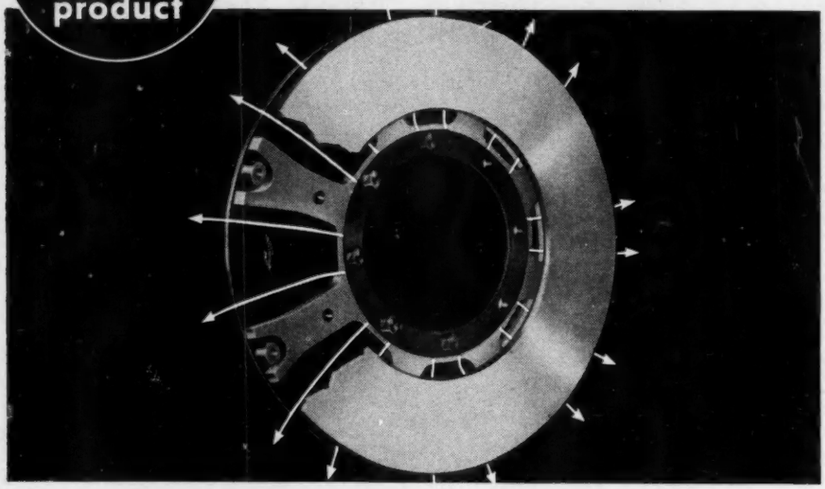
A handy-sized Clark Products book is yours on request; indicates several reasons why leading manufacturers find it **good business to do business with CLARK.**

CLARK EQUIPMENT COMPANY, Buchanan, Michigan

OTHER PRODUCTS OF THE CLARK AUTOMOTIVE DIVISION—
TRANSMISSIONS • AXLE HOUSINGS • TRACTOR UNITS • TORCON TORQUE CONVERTERS ELECTRIC STEEL CASTINGS • GEARS and FORGINGS • FRONT and REAR AXLES for TRUCKS, BUSES and OFF-HIGHWAY EQUIPMENT.

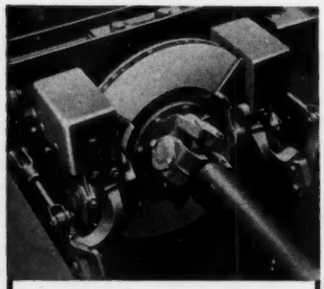
an ACCO product

Specify Tru-Stop Emergency Brakes



This Brake "Breathes"— and Linings Last Longer

• TRU-STOP Emergency Brakes are offered by leading manufacturers of trucks, buses, tractors and special equipment either as standard or optional equipment. Specify factory installation of TRU-STOPS to insure all of these braking extras:



Longer Lining Life
The terrific heat generated in braking cuts lining life. As illustrated above, TRU-STOPS' special ventilated design quickly dissipates this heat. Most of the disc is exposed to the air even during braking. And a cooling jet of air circulates through the disc, prolongs lining life.

Real Emergency Braking
TRU-STOPS are real emergency brakes. They serve as auxiliary brakes, assisting service brakes on down-grades if required. And they can bring the vehicle to a smooth, quick stop.

Smooth, Positive Stops
TRU-STOPS prevent accidents by insuring quick, positive stops in emergency situations.

Positive Parking Brakes
TRU-STOPS hold safely on steep grades—prevent "parking brake" accidents.

Specify TRU-STOPS for factory installation on your next vehicle.

Lower Service Requirements
TRU-STOPS are mounted directly on the drive shaft. Their simplicity of design and accessibility greatly reduce maintenance requirements. Relining or adjustment is a simple job for any mechanic with ordinary tools. It is not necessary to drop the drive shaft.

For full details on TRU-STOPS write for booklet

ACCO
Automotive and Aircraft Division
AMERICAN CHAIN & CABLE
601 Stephenson Bldg., Detroit 2
2216 South Garfield Ave., Los Angeles 22 • Bridgeport 2, Conn.

TRU-STOP Emergency Brakes

Your Maintenance Dollar

Continued from Page 140

that this type is much more costly, however.

Only response to this comment was from Chairman Crockett who cited his personal experience with a passenger car in which the fan had been disconnected. He said warm-up time was improved 20 per cent and that the car did not overheat, except under conditions of prolonged tie-up in traffic. Crockett cited the experience of his company with buses equipped with temperature control fans showing that the savings in fuel costs over the life of the vehicle are enough to warrant the additional expense of such equipment.

Off-On Controls

L. R. Twyman, Warner Electric Brake, commented on off-on fan controls versus the modulated type. He said that several years ago his company installed a fan clutch, actuated by an electric off-on switch, on a passenger car and tested it during the high heat months. The fan ran only 2 per cent of the time within a total range of eight degrees, in ambient temperatures up to 100 degrees. He concluded that the modulated fan control is better for trucks but that the on-off type is a more practical solution where cost is a prime factor. He said that a $12 to $13 limit imposed by a passenger vehicle manufacturer makes the on-off type the only logical one because the modulated controls are too costly except for truck use.

Leo G. Wright, representing the city of Milwaukee, reported that several years ago electrically controlled temperature sensitive fans were specified for police cars at a cost of $35 to $40 each. Results were eminently satisfactory with sludging greatly reduced and other operational benefits equally apparent. He indicated that the fans no longer are available but that he would like to see them on the market again.

END

Please Resume Reading Page 82

...AMERICAN HAMMERED

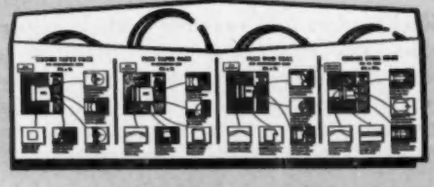
pre-seated Krome-Oil piston ring sets mean longer life, less maintenance cost!

All major engine manufacturers are using chrome piston rings as original equipment—recommend them for replacement. Latest survey figures indicate 57% of dealer installations are chrome.

Pre-seated Krome-Oil easier for you to install! Here's why . . .

Pre-seating is a factory-applied lapping process equivalent to many hundreds of miles of actual engine operation—assures instant oil control. In addition, rugged dynamometer tests and strict manufacturing controls assure Krome-Oil's ability to hold oil on even the toughest jobs.

Be sure you're installing a full chrome ring set. Check for chrome on the top groove compression ring, on the rails of the oil ring. Install chrome confidently because Krome-Oil is pre-seated, seats instantly.



All-in-one ring envelope

All-in-one ring envelope contains all the rings for one piston. Packaged in order of installation. This prevents mix-ups, saves mechanic's time.

Handle the tough jobs right the first time—
avoid costly comebacks

INSTALL KROME-OIL

American Hammered

AUTOMOTIVE REPLACEMENT DIVISION

2001 Sanford Street • Muskegon, Michigan

Manufacturers of American Hammered Automotive Replacement Piston Rings. A Division of Sealed Power Corporation

For the best in fleet maintenance remember profit-packed American Hammered Power-Plus Service—Keatherizing • CI-60 Groove Insert

Are Colds Costing You Money?

QUESTION: **How much work time is lost due to colds?** Answer: Statistics by the Metropolitan Life Insurance Co. indicate that from 40 to 50 per cent of all days lost from work are caused by colds and their complications.

What are your chances of not catching a cold this season? Rather remote, since only 6 per cent of all people weather an entire year without a cold. About 60 per cent of the people catch two or three colds a year, and more than 20 per cent will have five or more during the year.

Is more time lost on any particular day of the week? Yes, it is a strange fact that office workers and other employees catch more colds on Monday than any other day of the week.

How many working days a year are lost by the average worker due to colds? The average worker loses 3 to 4 days a year through simple colds, without complications.

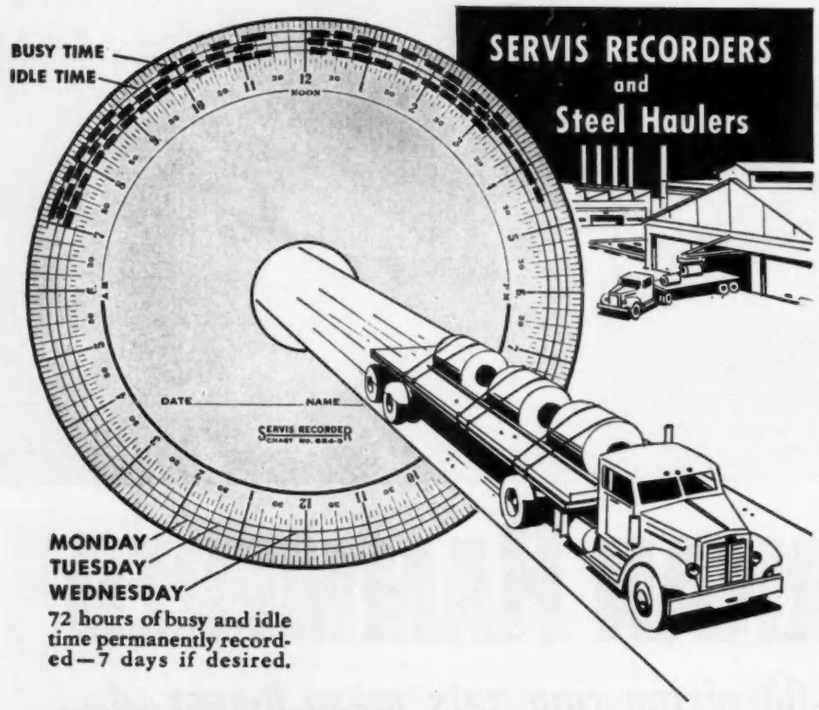
What age group is the most susceptible to colds? From 20 to 29 years of age. The lowest number of colds is found in the age group above 50 years, but here the colds tend to be more serious.

What are the most dangerous periods for catching cold? The common cold reaches its peak figures in December or January, with a lesser peak in October. There seem to be more sudden drops in temperature during these periods and such drops are generally followed by a rise in the incidence and severity of colds.

Do working conditions have any effect on the number of colds? Yes, there is more chance of catching cold in a dusty office or factory than in a room free of dust. Dust irritates the mucous membranes of nose, throat and bronchi, thereby diminishing the resistance against colds. Irritating fumes, produced by melting products and chemical materials, may produce a sore throat or cough which may open the way to some other more serious illness.

What can an individual do to help prevent colds? He can be cautious. This means wearing the right kind of clothing. If you feel cold, don't hesitate to wear another sweater or a woolen scarf. Get plenty of sleep and don't overeat. Sports and exercises will harden your body and reduce the inclination to colds. Plenty of fresh air—including an adequate amount while sleeping at night—will prove excellent for the respiratory organs. There is some truth to the old saying, "If you keep your head cool and your feet warm, you will avoid colds."

What can be done once a cold is contracted? Heat is the best and most efficient remedy, by external as well as internal methods, such as hot water bottles, electric pad, hot bath, warmth in bed, then taking hot tea or lemonade. Aspirin, the old household remedy, gives excellent protection against a developing cold. Fruit and especially citrus fruits are helpful, although they are not necessary if the normal body functions are on schedule. There are many oils and drugs on the market for decreasing the swelling of the mucosae of the nose.



72 hours of busy and idle time permanently recorded—7 days if desired.

SERVIS RECORDERS HELP DELIVER SAFELY, PROFITABLY, ON TIME

Steel haulers find answers to their major problems—safe, efficient delivery reliably dovetailed with manufacturers' production needs—with Servis Recorders. These compact, dependable instruments chart permanent, easily-read records of travel and idle time each trip.

Tamperproof, Servis Recorders defend the good driver; give management unquestioned authority to find out about long fueling stops or unusual delays that encourage speeding to "make up" time. Servis Recorders with either one day, three day, or seven day charts prove the fairness in schedules; improve efficiency and morale, and insure satisfaction from shipper and consignee.

For full details ask for free illustrated booklet, "Ten Ways of Getting More Work Out Of Motor Trucks." The Service Recorder Co. 1375F Euclid, Cleveland 15, Ohio.

The Servis Recorder
Tells Every Move Your Truck Makes

specially designed for trucks!

PROVIDES QUICK, EASY ADJUSTMENT OF HEADLAMP AIM TO VARYING TRUCK LOADS!

A great new safe-driving idea for drivers who roll at night! Now, truck headlamps can be adjusted for the load in a hurry. Drivers can make adjustments for whatever load they may be carrying, and they can *readjust* to a different load for the return trip.

A new Guide T-3 Aimer, a screwdriver and three minutes is all you need to re-aim T-3 headlamps perfectly—for *more light . . . aimed right!* Then headlamps provide the extra safety of extra light . . . yet you can be sure of never exceeding legal limits.

• • •

This new Guide T-3 Safety-Aimer is specially calibrated to provide aimer adjustment for the headlamps on any truck. What's more, it is a rugged, compact unit . . . easy to carry, easy to use. And, the price is only $18.95 per pair!

Television Keeps Traffic Moving

A SPEEDING DRIVER on Detroit's John Lodge Expressway rammed his car into the rear end of a slower-moving vehicle the other day. The accident was not serious but fast-moving traffic on the freeway was blocked. A major tie-up was in prospect.

At the time, there was no police car or tow truck in sight. But in two minutes, two policemen were diverting traffic around the damaged cars. And within three mintes, a tow truck arrived to pull the smashed vehicles off the expressway.

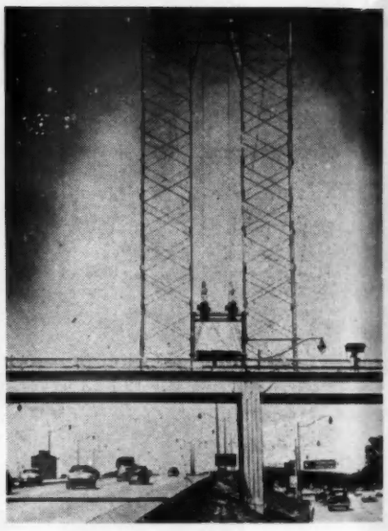
Television at Work

Damon Stetson, who described the incident in the "New York Times," pointed out that the policemen and the tow truck had been directed to the scene by a television monitor. The monitor was observing expressway traffic from a control room three miles away.

This interesting traffic experiment is being carried out jointly by the Detroit Department of Streets and Traffic and the Michigan Bell Telephone Co. In this experiment traffic movement on sections of Detroit's expressways is being monitored by means of closed circuit television.

Monitoring Center

In this experiment, a monitor room was set up with television sets; special telephones, remote controls and other items of special equipment were installed. At the same time three television cameras were set up on selected vehicular and pedestrian bridges on



important sections of Detroit's Ford and Lodge Expressways connecting Detroit with suburban areas. The cameras were tied in with the monitoring center through direct wire or cable facilities.

Traffic was monitored during peak travel periods both morning and afternoon. Special tests were conducted at night during periods of darkness and with different types of street lighting. The monitor discovered the kind of accident that had happened, the place of the accident and possibly its seriousness.

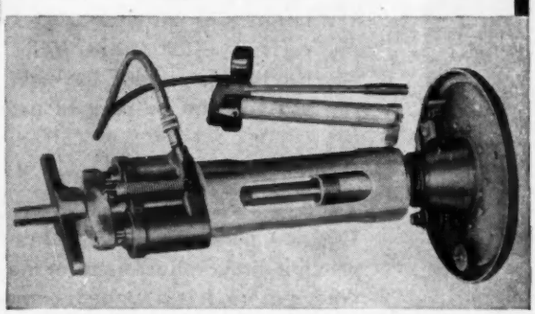
Special Phone Lines

By means of a special telephone line to the police dispatcher they have been able to direct police cars and tow trucks to the scene of the accident quickly. An ambulance or a fire truck could be dispatched immediately. They

(TURN TO PAGE 150, PLEASE)

OTC ANNOUNCES

HYDRAULIC TRUCK AXLE TUBE PULLER



OTC 50 Ton hydraulic unit removing tube from truck axle housing—set up and pulling takes only a few minutes.

SAVE HOURS OF LABOR AND DOWN TIME ON EVERY PULLING JOB

With this new OTC 50 Ton hydraulic puller set, truck axle tubes may be removed (even if broken) and installed in minutes instead of hours. Assembly is simple and positive—tubes are removed without damage—and installed without distortion. Costly *Down Time* is cut by hours.

The OTC 50 Ton hydraulic unit is adaptable to hundreds of similar jobs. With the many OTC pullers and adaptors available it may be used as a portable power unit in shop or field, to push, pull, spread, lift, and straighten.

Shops already equipped with the 50 Ton unit need only to add the appropriate pulling and installing attachments.

SEE YOUR JOBBER OR WRITE US FOR COMPLETE INFORMATION

One man can quickly install a truck axle tube without distortion with a new OTC 50 Ton hydraulic unit.

FREE NEW HYDRAULIC PULLING BOOKLET

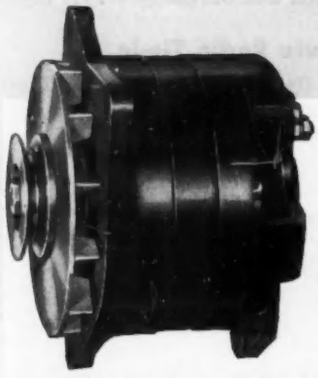
OWATONNA TOOL COMPANY 341 CEDAR STREET OWATONNA, MINNESOTA

Leece-Neville

12 VOLT ALTERNATORS FOR YOUR '56 FLEET

L-N Heavy-Duty Alternator

This 12 volt L-N Alternator is mechanically the same as the familiar Type 5058, the 6 volt, 95 ampere L-N Alternator that has been proved on thousands of cars and trucks since 1946. It delivers up to 60 amps at 12 volts. L-N Transformer can be attached to give up to 800 watts of 110 volt portable power.



L-N Standard Alternator

This is the 12 volt version of the latest L-N Alternator, that actually costs *less* than "extra" output d.c. generators. Typical Leece-Neville quality. Output: 50 amps at 12 volts (equal to 100 amps at 6 volts).

A RIGHT SIZE L-N ALTERNATOR FOR EVERY NEED

For 6 volt systems capacities range from 55 amps to 95 amps. Alternators from 30 to 180 amps are available for 12 volt systems. Also for 24 and 32 volt vehicles. L-N Alternators weigh *much* less than comparable d.c. generators.

EITHER the Standard or Heavy-Duty Alternator will give your '56 fleet all the famous advantages of the Leece-Neville a.c.-d.c. generating system, including: 1 - Always a charged battery 2 - Constant voltage for longer life of electrical units 3 - Unequalled reliability and freedom from breakdown. *Be sure to specify Leece-Neville on your '56 fleet.*

There are many more advantages to Leece-Neville Alternators. If your present fleet is not Leece-Neville equipped, send for all the facts and name of your L-N Distributor. Write The Leece-Neville Company, Cleveland 3, Ohio. *Distributors in principal cities . . . Service Stations everywhere.*

YOU CAN RELY ON Leece-Neville

Automotive Electric Equipment Since 1909

TRUCK · BUS · DIESEL · INDUSTRIAL · PASSENGER · RAILROAD · MARINE · OFF-HIGHWAY

ALTERNATOR SYSTEMS

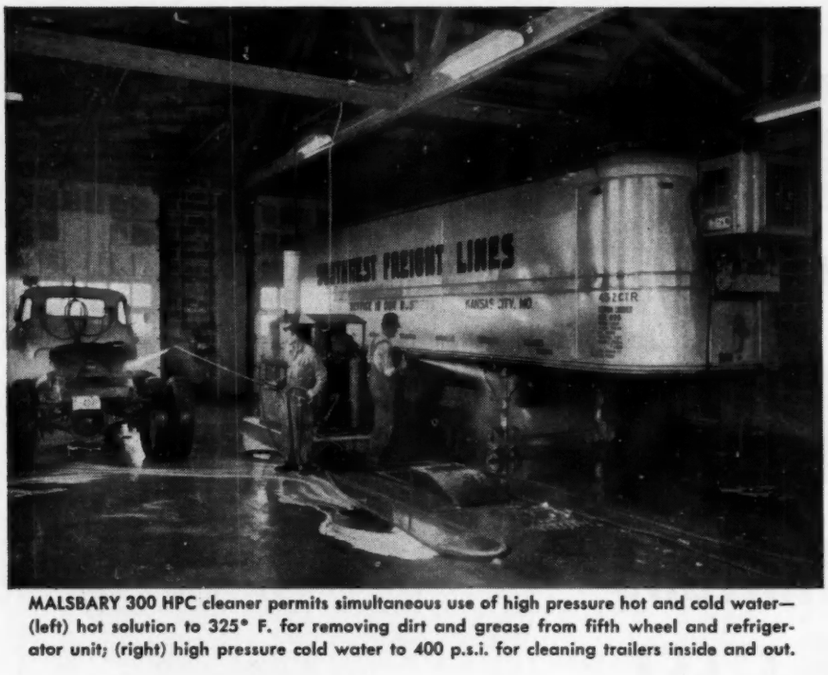
D C GENERATORS

CRANKING MOTORS

REGULATORS

SWITCHES

SMALL MOTORS



MALSBARY 300 HPC cleaner permits simultaneous use of high pressure hot and cold water—(left) hot solution to 325° F. for removing dirt and grease from fifth wheel and refrigerator unit; (right) high pressure cold water to 400 p.s.i. for cleaning trailers inside and out.

Got a Big Fleet to Maintain?

Use Malsbary 300 HPC Cleaner

"Malsbary 300 has everything we want; capacity for two operators, will run 16 hours a day, day after day. We've had no downtime in nine months' constant operation," reports W. Hays, Fleet Manager for Southwest Freight Lines, operators of 350 tractors and trailers.

After each road trip, Southwest Freight Lines cleans its trailers, inspects tractors and cleans them where appearance requires it. A Malsbary 300 HPC (high pressure combination) cleaner, capable of simultaneous high pressure steam cleaning and cold water blasting has proved to be just the ticket for this big fleet. It cleans a tractor or trailer, including refrigerator unit, in 60-75 minutes, handles 20-35 trucks and tractors daily.

Take a look at these cleaning actions you get with Malsbary 300:

1. High pressure hot solution to 400 p.s.i. at 325° F. to soften and blast away waterproof greases, tars, corrosive oil and dirt.

2. High pressure cold water to 400 p.s.i. for rapid removal of caked mud and dirt, or cold rinsing after steam cleaning.

3. High pressure hot water to 400 p.s.i. at 200° F. to melt and remove ice and frozen mud, or to rinse equipment.

4. Low pressure wet steam (15 boiler hp.) to degas and clean tank interiors or for deicing, general heating and thawing.

5. Low pressure warm water for washing trucks, tractors, etc.

6. Simultaneous high pressure steam and high pressure cold water.

7. Simultaneous steam cleaning and degassing tank interiors while high pressure cold water cleans exterior.

No wonder Southwest Freight Lines and so many other big fleet operators find Malsbary 300's the answer to their maintenance cleaning problems.

Big fleet or small? Malsbary makes the only complete line of steam cleaners on the market; models from 50 to 400 p.s.i., and 60 to 2,100 g.p.h. Call your Malsbary dealer NOW and get the right size cleaner for your fleet.

86

MALSBARY

SINCE 1921 MANUFACTURING CO.

Room K 845-92nd Ave., Oakland 3, Calif.

TV Traffic Control

Continued from Page 148

have also been able to direct police officers to close specified ramps during periods of emergency to prevent build up of congestion and thus prevent complete temporary breakdown of the expressway.

Television offers a great deal of promise as a detection device. It is the belief of traffic engineers who have worked with it that its best use will be realized when it becomes an integral part of an overall traffic control plan. Under such a plan controls would be installed in the monitor room. They would enable the observer not only to dispatch police, fire, and emergency vehicles but would also enable him to operate signs, signals and other control devices on entrance ramps and on the expressway proper.

By this method it would be possible to control traffic, isolate the critical area and prevent a major breakdown.

Auto Radio Tie-In

Detroit traffic experts think that about two-thirds of the motorists there have radios in their cars. Consequently, as Mr. Stetson pointed out, they feel that it would also be worthwhile for the monitor to relay word to radio stations for quick transmittal to drivers. A driver on the expressway would know there was trouble ahead and might choose to leave the high-speed facility. And a driver planning to use the expressway could change his route if he was informed about a congestion in prospect.

Other television tests were conducted from varying heights ranging from approximately 20 ft to about 100 ft above the road surface. Remote control equipment in the monitor room enables observers to traverse and elevate television cameras.

"This rig aint got no cigarette lighter!"

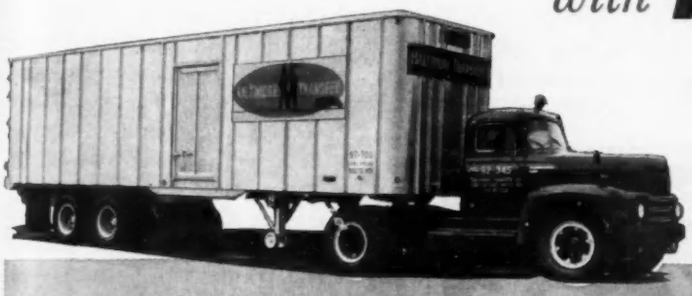
another great fleet reports

BETTER BRAKES

LESS DRUM WEAR—LOWER COSTS

with **WORLD BESTOS**

RED BLOCK



BALTIMORE TRANSFER

MR. WARD L. BENNETT, Supt. of Automotive Equipment *says:*

"We have been using World Bestos Red Block Combination for five years. It gives us better stopping ability than any blocks we have tested or have tried in service. We certainly get our "money's worth" of mileage . . . and Red Block has greatly reduced our purchases of replacement brake drums."

...BALTIMORE TRANSFER—MOTOR FREIGHT EXPRESS

Baltimore Transfer—Motor Freight Express (1150 truck and trailer units) are widely known for their outstanding preventive maintenance program. A small portion of their extensive shop facilities is shown here.

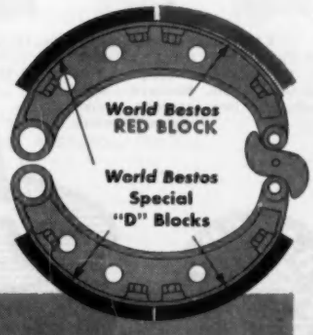
Red Block *gives proven Safety and Savings*

World Bestos RED BLOCK, the only heavy duty brake block with a No-Fade Guarantee (heat or water) assures *safer* brakes under all operating conditions.

Exclusive formulas used in the RED BLOCK Combination prevent excessive drum wear, glazing and heat checking. Drum replacement cost is reduced; blocks give more mileage.

Baltimore Transfer, P-I-E, Navajo, Mayflower are just a few of America's top-ranking fleets who have proved by experience that RED BLOCK is unsurpassed for safety, savings and all-'round satisfaction. RED BLOCK is indispensable to any successful preventive maintenance program!

World Bestos gives you
MORE STOPPING POWER



Prove it for yourself! Try RED BLOCK on your biggest rig. Call your World Bestos Distributor or write direct to the factory.

WORLD BESTOS NEW CASTLE, INDIANA

Planning a Tractor-Trailer Shop

Continued from Page 70

The second room houses the engine dynamometer. If there is to be complete engine rebuilding there certainly should be provision for at least an engine run-in stand and preferably a complete dynamometer. Either of these can also be extremely noisy when placed inside main shop areas. Hence, this additional separate room is strongly urged.

Trailer Shop

Progressing now to the right of the center section we come to the trailer shop which in this case consists of one basic unit 25 ft wide and two additional units 18 ft wide. All are 100 ft deep.

These dimensions have been picked to provide adequate working space in the secondary units and additional space for basic metal and wood working tools in the first and larger area. It is presumed that this section would also include some means of providing for trailer straightening and alignment. Many fleets believe that the most economical way to handle this is to imbed two 35 ft I-beams in the concrete floor. These provide a rigid straight surface from which damaged trailer bodies and frames can be jacked or pulled back into position.

It can be argued that the secondary trailer repair areas can be less than 18 ft wide and the same argument applies to the inspection lanes discussed below. We have seen some as narrow as 14 ft but this provides only 3 ft of working space on each side of the trailer. Hence most fleets agree on the minimum width of 18 ft. The 100 ft depth accommodates two 35 ft trailers with plenty of working space at the ends or can hold three trailers of shorter length.

Inspection Lanes

Next come two lanes each 55 ft long designed for use for both daily safety inspections and lubrication. The 55 ft length is designed to accommodate the 45 ft overall combination length prevalent in most eastern and midwestern states. Obviously in western areas this would be increased to at least 70 ft to accommodate the 60 ft combination.

Each of the lanes is fitted with a full length pit to facilitate lubrication and underbody inspections. Again width has been kept adequate to provide space for oil and grease drums between the two areas. These presumably would be fitted with electric pumps and metered hose for convenient and speedy lubrication operations. Here too would be located spare supplies of all types of lamp bulbs, reflectors, flares, fusees, and other safety equipment items used by the fleet.

All too often road equipment

(TURN TO PAGE 156, PLEASE)

Combine Sturdiness-Strength-Stamina with

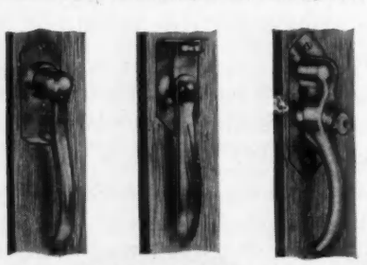
Heavy-Duty HARDWARE

HERE'S a lock specially designed for heavy-duty service. It's sturdy—strong—durable—simple in design and easy to apply.

Locking bolts are held open or closed—under pressure. This prevents accidental opening. A simple, ingenious center mechanism snaps open or shut. No rattle or play.

Adaptable for either right or left-hand doors. No rights or lefts! Lock bolts are generous in size. Three different combinations. Used interchangeably with three handles, as shown.

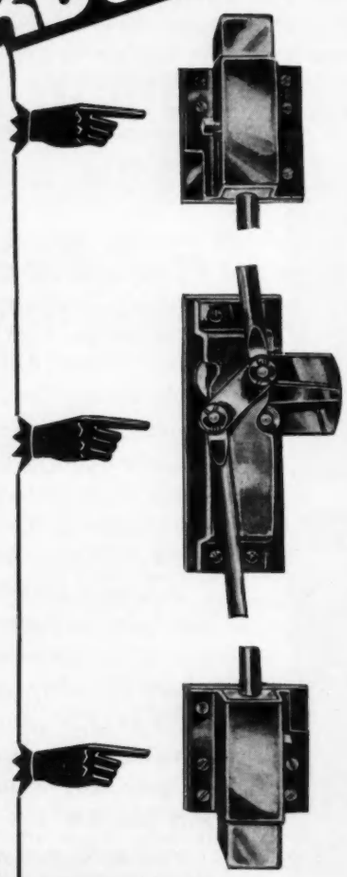
SEND FOR NEW CATALOG which illustrates this and other HANSEN products—many new!



No. 111-A HANDLE AND ESCUTCHEON. Wt. 1½ lbs. For side or rear doors. Handle, 7¾" long, 4½" grip.

No. 111-B HANDLE AND ESCUTCHEON. Weight, 1 lb. Maximum truck capacity; minimum overall width.

No. 111-C HANDLE AND ESCUTCHEON. Wt. 1 lb. Handle, 7¾" with 4½" grip.



Hansen

HANSEN HARDWARE for Commercial Bodies

A. L. HANSEN MFG. CO.

5047 RAVENSWOOD AVE., CHICAGO 40, ILL.

Now batteries stay charged

in door-to-door delivery service with Delco-Remy extra-duty electrical equipment

Delco-Remy's extra-duty generators with matching regulators are designed to meet the steady electrical demands of door-to-door delivery service. Your battery is protected from excessive discharge and cycling effects . . . stays charged, lasts longer.

Other units in the extra-duty line also help to keep door-to-door vehicles working—for example, the special-duty coils for 6-volt systems which protect distributor contact points from destructive burning during low-speed, high-temperature operation . . . the rugged new extra-duty Delco batteries with long-lasting rubber separators and Delcoloy grids. Combined, these extra-duty units assure more dependable electrical performance in door-to-door service . . . help give vehicles more earning hours on the job.

Specify Delco-Remy extra-duty electrical equipment when you order new vehicles. Re-equip your present vehicles for greater efficiency. Complete details on Delco-Remy extra-duty electrical equipment are available through your General Motors car or truck dealer, or the United Motors System.

DELCO-REMY DIVISION OF GENERAL MOTORS • ANDERSON, INDIANA

RTING WITH **Delco-Remy** ELECTRICAL SYSTEMS

Tractor-Trailer Shop

Continued from Page 152

waiting to enter an inspection lane is completely idle. Hence the suggestion that the fuel island be located between and immediately in front of the inspection lanes so that fuel can be taken on and properly recorded while the unit is waiting for a "shot" at the inspection lanes.

Tire Department

The 55x25 ft tire maintenance lane provides sufficient width for both tire storage and tire repair equipment such as basic spreaders, wheel dollies, etc. It is assumed that in this instance major tire maintenance such as recapping and cross-section repairs will be farmed out. If this is to be done on the premises a separate shop would be provided and width of the tire lane could be narrowed.

On the suggestion of several fleets that we have visited, some quick and efficient means of jacking a loaded trailer should be provided in this lane. Perhaps the most efficient is a heavy-duty single post hydraulic lift capable of raising any axle unit, including a tandem group, off the ground, even when the vehicle is fully loaded. An alternative would be a portable air-operated jack, preferably mounted on spring loaded casters. Such equipment greatly speeds up the tire change operation. An air or electric lug wrench and a pair of wheel dollies would also be standard equipment.

Wash Lane

The last lane is the washing area and for obvious reasons should be provided with either a permanent or perhaps a corrugated plastic wall between between it and adjacent spaces. This not only confines the spray but also provides convenient wall space for tire storage on the other side.

The wash area undoubtedly would be fitted with at least a simple U-shaped water spray, preferably at both ends. These would be capable of thoroughly wetting the unit as it comes in and rinsing it as it goes out. A very good time-

(TURN TO PAGE 158, PLEASE)

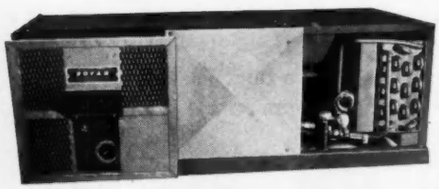
NO hold-over plates

NO gasoline cooler equipment

NO dirty, wet floors

ROVAN *all electric*

TRUCK REFRIGERATION . . .



. . . keeps cargoes at 35-40° *24-hours a day* without ice or hold-over plates!

Here's what you get with *ROVAN!*

- Constant 24-hour refrigeration—35-40° even with 100° ambients
- General Electric power system—110-115 volt AC standby
- Full capacity at engine idle—no drain on truck electric system
- Completely packaged and insulated
- Easy installation—no extra bulkheads to build
- Units for 300 to 600 cu. ft. insulated truck bodies

On the road, or overnight on standby, you pack *more* into space that *used* to be needed for ice, hold-over plates and gasoline equipment. Now, clean, dry Rovan all-electric units keep temperatures at 35-40°—even with many door openings and 100° ambients. Body rust is cut 'way down. Delivery runs are longer, payloads larger, and each truck is its own refrigerated warehouse at night.

For details, write *today* to:

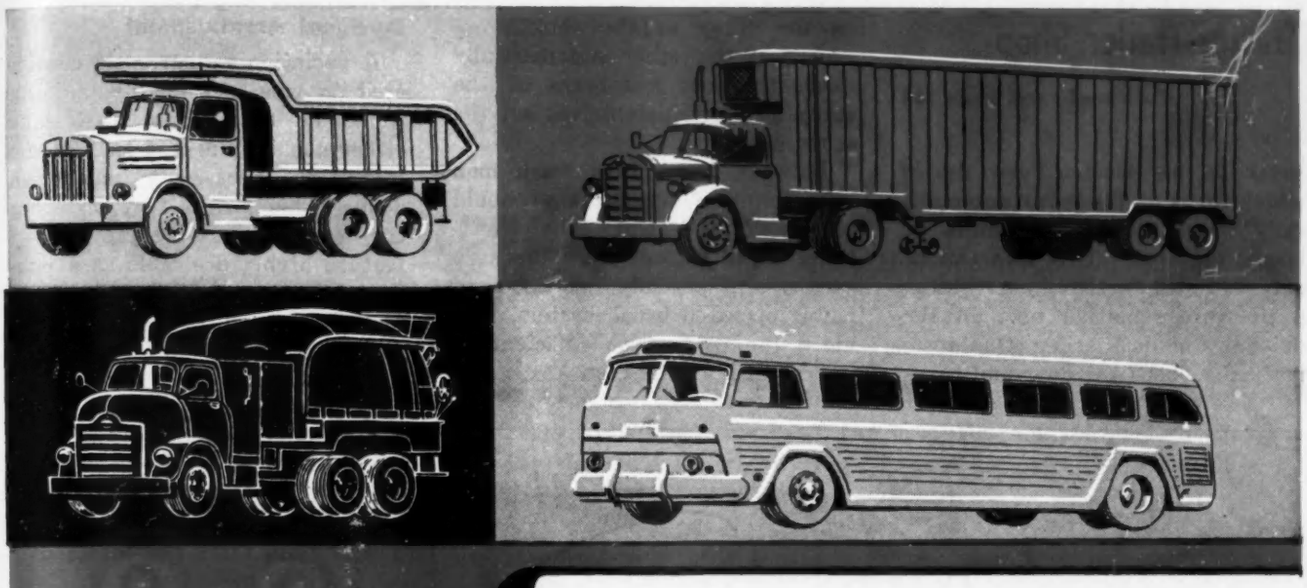
THE FRANK-DEWEY COMPANY

10228 Woodward Avenue • Detroit 2, Michigan

Telephone: TAlbot 8-1206

It's Tubeless Too

Weighing around 2000 lb and selling for more than $5000 this huge tubeless tire is manufactured by Goodyear Tire & Rubber Co. for gigantic earthmoving vehicles. Contrasting the big tire with company's smallest tubeless tire for industrial use, the smaller one weighs only 3 lbs and sells for about $6. Size of earthmover is 33.5 x 33, 38-ply rating.



2 make a team for Diesels!

A great Diesel team—Gulf Dieselect Fuel and Dieselube Motor Oil H.D.—assures you maximum performance and keeps your operating costs in line.

1. Gulf Dieselect Fuel

This exceptionally clean burning fuel helps prevent fouling of oil control rings and reduces ring sticking.

It is a straight run distillate (contains no cracked material) that does not form harmful deposits in tanks, filters, and injectors. It has high volatility, a high cetane index and low end point.

You can be sure of cleaner valves and minimum smoke with Gulf Dieselect Fuel because it burns so evenly and completely. Try it for a new kind of engine performance.

2. Gulf Dieselube Motor Oil H.D.

The Diesel lubricating oil that combines quality and economy —that delivers high mileage, yet is low in cost.

Gulf Dieselube Motor Oil H.D. is a heavy-duty type oil that not only provides effective lubrication, but has the right level of detergency to prevent harmful deposits on pistons, piston rings, and oil screens.

Let us prove that Gulf Dieselect and Gulf Dieselube Motor Oil H.D. can do a better combustion and engine lubrication job in your Diesel fleet. Contact your nearest Gulf office, or write on your letterhead to Gulf Oil Corporation, 1822 Gulf Building, Pittsburgh 30, Pa.

GULF

Gulf Oil Corporation
Gulf Refining Company

The finest petroleum products for all your needs

Tractor-Trailer Shop

Continued from Page 156

saver is an electric eye device which turns on the spray automatically when the vehicle enters or leaves the area. This idea can be extended still further by providing a pressure sensitive tube in the driveway at both ends. One automatically opens the door and turns on the spray as the vehicle approaches, the other automatically closes the door and turns off the spray as the vehicle drives out the other end.

Between the sprays wash men with fountain type brushes would scrub sides and ends. Other variations would include high pressure sprays and possibly an elaborate power operated brush system, provided the traffic was sufficient to warrant the initial cost.

Optional Arrangement

A variation we seriously considered in this end of the building would be to place a wash lane either ahead or behind each of the inspection areas. It has been done. This means that on every trip a wash would be provided—a feature highly desirable as a public relations asset, but admittedly rather expensive.

This arrangement, however, somewhat reduces the flexibility of operations and raises still another problem. If you wash just before a lubrication it means that the greasers must deal with dripping wet equipment. On the other hand if you wash after the lube job it can and has been argued that you will wash out some of the grease as well.

Dynamometer Building

As mentioned early in the article we strongly recommend that if a chassis dynamometer is to be included, it be located in a completely separate building probably located near the edge of the property line.

An excellent example of this arrangement may be seen at Winston-Salem, N. C., as a feature of the McLean Trucking Company. It was described briefly in COMMERCIAL CAR JOURNAL (June '55, page 72). The building need be large enough only to accommodate a single tractor, the various appurtenances pertaining to the dynamometer installation, plus suitable tools. A building 14 ft wide by 20 ft long would normally do the trick nicely.

Basic Calculations

Our story would not be complete without some discussion of the factors involved in deciding on the size of any given shop and its individual areas. Actually the computations are extremely basic although in practice we realize they can become complicated.

As an example let's discuss the various sections of our composite shop. As we said at the beginning of the article, we believe it is adequate for a fleet of approximately 200 tractors and 300 trailers with the tractor units operating ap-

(TURN TO PAGE 160, PLEASE)

PROTECTION

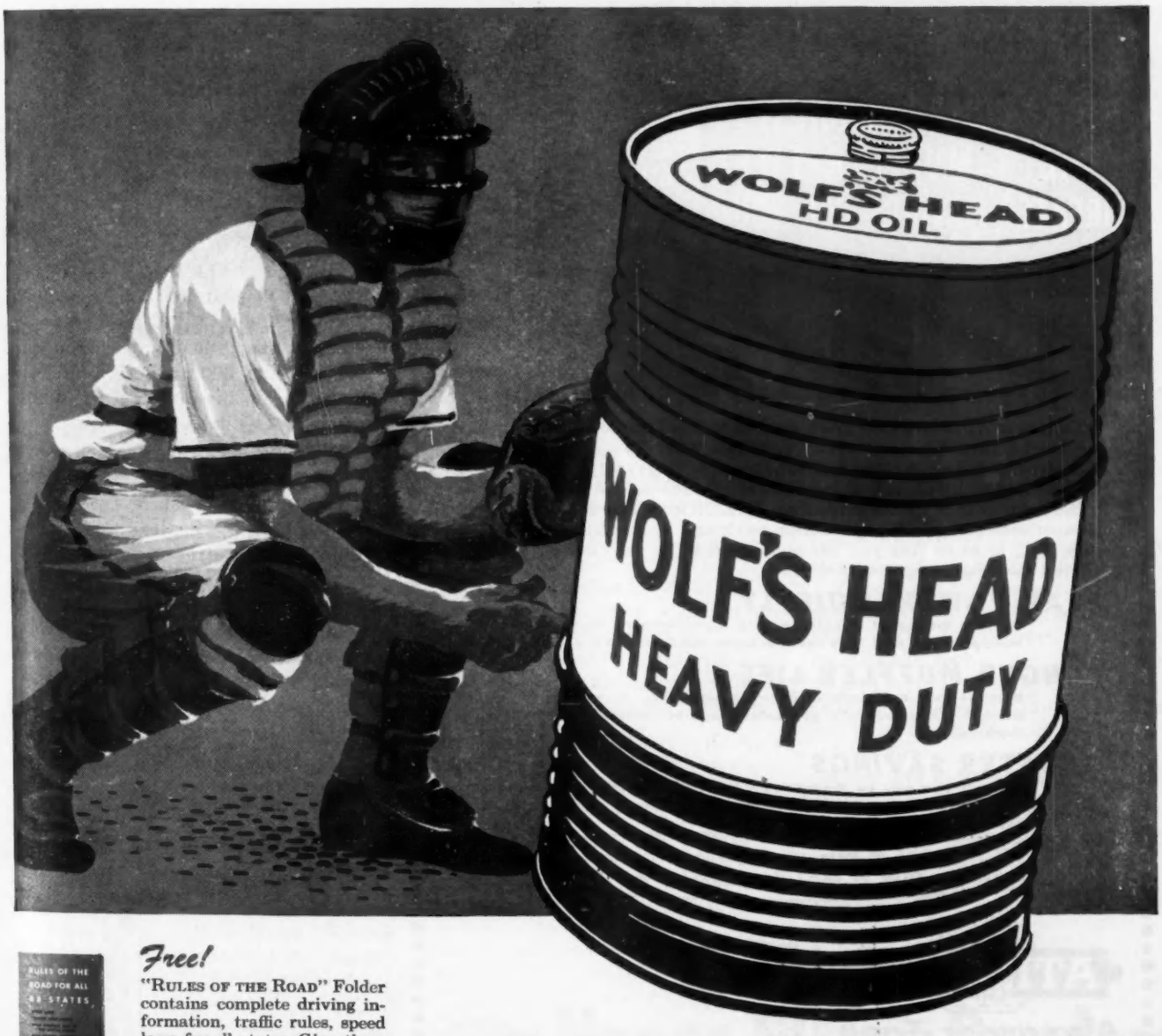
...where it's needed

Like a mask protects a catcher's face, WOLF'S HEAD protects car and truck engines because it's tough and durable.

WOLF'S HEAD Motor Oil—100% Pure Pennsylvania—is specially refined three extra steps from nature's finest crude oil. It stays rich and tough every mile of the way. And WOLF'S HEAD is scientifically fortified . . . *it cleans as it lubricates.*

WOLF'S HEAD Heavy Duty Motor Oil provides exceptional film strength and high detergency for vehicles in heavy duty service, protecting engines against corrosive wear. And it holds oil consumption to a minimum.

Ask about the free WOLF'S HEAD Laboratory Control Plan. It keeps your fleet rolling with less down time.



Free!

"RULES OF THE ROAD" Folder contains complete driving information, traffic rules, speed laws for all states. Give them to your drivers.

WOLF'S HEAD OIL REFINING CO., Inc.
OIL CITY, PA.
New York Office: Glendale 27 N. Y.

WOLF'S HEAD MOTOR OIL AND LUBES

100% Pure Pennsylvania—Scientifically Fortified — Member, Penna. Grade Crude Oil Association

Tractor-Trailer Shop

Continued from Page 158

proximately 4000 miles per month (this is a fairly low figure but makes basic computations easier).

Tractor Repairs

Assuming that each of the 200 tractors comes in once a month (or each 4000 miles) for a major inspection, this would consume 800 hours per month (4 hours times 200 units) and would require four stalls for this purpose (800 hours required divided by the 200 hours available). We can further assume that every four months, or approximately 16,000 miles, the tractors would come in for a secondary inspection requiring 8 hours of time. This would include brake work when needed, valve, and cylinder head maintenance, and even a major motor change. Eight hours every four months would mean two hours every month times the 200 tractors, or 400 hours. Two additional stalls would be needed for this operation.

Finally, let's assume that for ordinary day to day service repairs covering driver complaints or defects revealed on inspection, we would require four additional stalls. This would make a total of ten. With one more for the front end alignment machine and a spare for emergencies makes a grand total of the 12 stalls provided.

Repeat: These are only examples and chances are good that in your operation this size shop could handle a considerably greater number of power units.

Trailer Repairs

Trailer repairs are admittedly more difficult to calculate and depend very largely on fleet experience. If the trailers have wooden floors — for instance — you know they will be in every so often for new floors. The fleet accident experience is another definitely controlling factor. At least once a year we can probably calculate that each of the 300 trailers would be in for a routine overhaul requiring perhaps 1½ days.

Working backwards on the above mentioned operations, the routine overhaul would require two spaces and accident repairs would undoubtedly require two more. Depending on the type of suspension used and the frequency of bearing and brake repairs, we could probably figure on at least two additional spaces for these operations. Thus we end up with the total of the six spaces in the three lanes.

(TURN TO PAGE 166, PLEASE)

GET PROOF

THAT ATI Muffler Numbers Mean

PEAK POWER... QUIETLY!
LONGER MUFFLER LIFE!
GREATER SAVINGS FOR YOU!

● Only your ATI Heavy Duty Truck and Bus Muffler Distributor can prove that he has the answer to your muffler problems. Why? Because he has coded numbers showing which of the *complete* line of ATI heavy duty "Engine Mated" mufflers *fit the cubic inch displacement of each of the engines in 24 different makes of trucks made from 1930-1955!* This is the result of years of experience and painstaking research conducted by Alexander-Tagg Industries, Inc., *to make sure you get mufflers that fit your truck engines*— not just the exhaust pipe—to give you:

PEAK POWER—QUIETLY
because they meet or better engine manufacturers' requirements as to back pressure. And, they equal or better AMA and ATA noise standards!

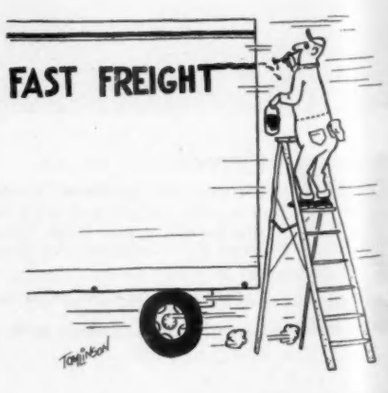
LONGER MUFFLER LIFE
because they are made of heavy gauge steel, all welded for added strength. They are fully guaranteed against defects in material and workmanship.

GREATER SAVINGS
because you pay no premium for these many exclusive advantages: lower operating cost per mile, longer life, fewer replacements, less maintenance.

GET PROOF of all these advantages today from your ATI distributor. Write us direct if you don't know his name.

ENGINE-MATED ATI HEAVY DUTY MUFFLERS
Alexander-Tagg INDUSTRIES, INC.
HATBORO, PA.—OSborne 5-7200
manufacturers of replacement mufflers, wheel dollies

Name.....
Address.....
City.....Zone.....State.....
Dept. CCJ

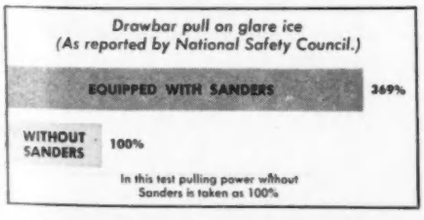


UP ICY HILLS...THROUGH DANGEROUS INTERSECTIONS...AROUND SLIPPERY CURVES

Safe delivery...*on schedule!*

Your trucks will roll this winter ... safely ... on schedule ... when equipped with NAPCO ELSTON SANDERS.

Flip a switch ... a stream of traction-giving grit drops in front of each drive wheel ... Tires dig in, your truck rolls ... on schedule.


Drawbar pull on glare ice
(As reported by National Safety Council.)
EQUIPPED WITH SANDERS
369%
WITHOUT SANDERS
100%
In this test pulling power without Sanders is taken as 100%

Fast Starts... Sure Stops. NAPCO ELSTON SANDERS enable your "must-go" vehicles to defy sleet and ice ... safely!

Prevent Accidents. When needed, the NAPCO ELSTON SANDER prevents dangerous skids and provides lightning fast traction.

A NAPCO ELSTON SANDER has, in many instances, given a driver the margin of safety necessary to prevent a serious accident ... and a NAPCO ELSTON SANDER can easily pay for itself by preventing just one collision.

Inexpensive. A NAPCO ELSTON SANDER costs less than the price and maintenance of chains, but unlike chains, it's built to last a lifetime. There are many ways a NAPCO ELSTON SANDER will pay for itself in a matter of months. It reduces wear on tires and transmissions. It saves power wasted in racing engines and spinning wheels on icy pavements.

Time is most important. How many hours did you lose last winter when your trucks were slowed or stopped by slippery highways? ... by putting on and taking off messy chains? ... in repairing damaged equipment? What did those lost hours cost you?

Lost time *costs money*. It pays to protect and keep your trucks moving.

Now is the Time. Write today for full information and the name of your nearest NAPCO ELSTON Distributor. You'll be under no obligation, of course.

Napco Elston Sanders

Manufactured by
Highway Safety Appliances, a Division of NAPCO Industries, Inc.,
Minneapolis 11, Minnesota

FEDERAL MOTOR TRUCKS • NAPCO LOADERS • POWR-PAK 4-WHEEL DRIVING AXLES • PARTS FOR SPECIALIZED AND MILITARY VEHICLES.

February News Roundup

Continued from Page 94

to provide more payload without any sacrifice in durability. It is possible that fruits of this program may get to the production lines within the next year.

Another interesting indication of ingenuity and flexibility possible in a small volume operation is a new concept of cab design and manufacture. New approach is to build the strength into the framework of the cab and attach sheet metal panels to it using more direct labor, rather than to design the strength into contoured sheets made with expensive dies. Evidence of this policy is seen in the new cab-over-engine model which Reo has just released. The doors are flat sheet metal cut to size and welded over a frame with the upper portion an extruded aluminum molding, weather stripped to seal the top and sides.

Retooling Economy

Tooling for Reo's V-8 engine is another example of the flexibility and ingenuity inherent in a smaller company without the volume to justify a normal full line tooling job. Reo utilized standard purpose machines it had on hand from its old Gold Crown 6-cyl line to set up the V-8 line. This involved redesign of jigs and fixtures, to accommodate the V-block and, in some instances, a new tool head.

However, the cost of altering existing machines was only a fraction of that required for a complete new tooling job as is normally done. Volume is low but adequate for current needs. In the event volume increases, as Reo currently expects that it will in the next couple of years, it probably will be necessary to expand the current tooling, but the added volume would justify the expenditure.

Sales and Service

Current emphasis is largely on the sales organization and this year will be aimed primarily at strengthening the dealer body. Last year effort was concentrated on the 30 branches located around the country, about ⅓ of which were moved to new locations or modernized. Most of the increase in business, incidentally, has come from the branches.

Reo now believes that since it has proved out its sales methods through its branch operations it now can do the same job through its approximately 520 dealers. There is no particular plan to increase the number of outlets but rather to concentrate on improving the quality. The company has gone back to the regional setup with managers in each of the five regions having full authority over all the branches and outlets in their territory.

(TURN TO PAGE 172, PLEASE)

UNIVERSAL . . . For the best Lubrication Maintenance!

GREASE GUN

- Full 360° all-steel swivel coupler
- One squeeze for regular greasing
- Every additional squeeze builds up more pressure (up to 12,000 pounds) for stubborn jobs
- Unconditionally guaranteed for 1 year

BALL-IN-HEAD FITTING

Keeps dirt out, grease in. Patented design permits easy release—it will not leak!

Universal's engineered equipment can cut your maintenance costs and do a top-notch job too. No matter how tough your lubrication problems might be, Universal has the grease guns, fittings and accessories that will make the job easier and save valuable maintenance time.

For futher information write for our new catalog.

UNIVERSAL LUBRICATING SYSTEMS, INC.

701 ALLEGHENY AVE., OAKMONT, PA.

Shop Stenographer: "That young, handsome maintenance engineer took me out riding last night, and there was trouble when we were only a few miles from town."

Auto Parts Clerk: "Engine trouble?"

Shop Stenographer: "No, engineer trouble."

IGHWAY

with HIGHWAY, the important feature is performance!

February News Roundup

Continued from Page 168

Trucks in '56

Best indication of the truck transport industry's growth is the big upsurge in registrations of heavy duty trucks above 19,500 lb GVW. Robert W. Black, president of White Motor Co., says registrations in the heavy category may well exceed 80,000 units in 1956 compared with 79,300 last year, which was the highest on record. The 1955 total represented an increase of 35 per cent over the previous year and was more than double the 37,330 registered in 1949. Of the 10.2 million trucks of all kinds in use, more than one million are large heavy duty vehicles.

New Truck Record?

Although new truck registrations in 1955 approximated 1,055,000 units to closely approach the 1950 record of 1,142,307, many factors may combine in 1956 to set an all-time record, says William C. Newberg, president, Dodge. Most important of all, there are now 1,522,000 trucks more than 12 years old operating on American highways, he pointed out. Approximately three out of each four new trucks registered during 1955 replaced trucks which were scrapped because of age or wrecks. Thus the 1956 scrappage alone may be expected to account for 790,500 new trucks. Many factors are creating a steady increase in the use of trucks, Newberg points out. For example: The tremendous increase in population in suburban areas since World War II. Deliveries of fuel, food and other necessities of life at greater distances require more trucks. The steady trend toward suburban shopping areas also is helping create a corresponding growth in truck use. The expected expanded national highway building program will contribute to increased truck registrations. Construction will require many more trucks. Every year the trucking industry is gaining a greater share of the freight business. Many business concerns realize their delivery trucks impress persons who see them on the streets, so they buy new units more frequently. Cost operating records are being kept by more truck owners each year, and thus many of them scrap their trucks more frequently to obtain lower delivery costs with new

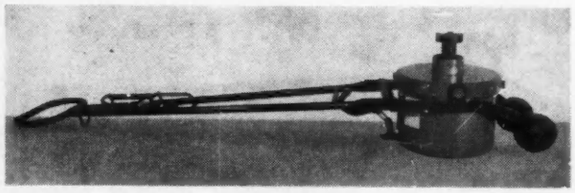
(TURN TO PAGE 174, PLEASE)

1955 Truck Trailer Shipments*

	November	Eleven Months
Vans:		
Insulated and Refrigerated:		
Steel	120	961
Aluminum	321	3,834
Furniture:		
Steel	120	1,596
Aluminum	33	217
All other closed-top vans:		
Steel	1,300	9,584
Aluminum	2,158	21,323
Open-top:		
Steel	245	1,816
Aluminum	262	2,276
Total—Value	4,559	41,607
Tanks:		
Petroleum	520	4,547
All other	77	638
Total—Tanks	597	5,185
Pole, Pipe and Logging:		
Single Axle	41	732
Tandem Axle	49	1,309
Total	90	2,041
Platforms:		
Racks, livestock and stake	66	1,151
Grain bodies	109	942
Platforms (flats), all types	655	7,366
Total—Platform	830	9,459
Low-bed heavy haulers	238	2,633
Dump trailers	122	1,876
All other trailers	345	3,674
Total—Complete Trailers	6,781	66,475
Chassis only	210	2,751
Total—Trailers and Chassis	6,991	69,226

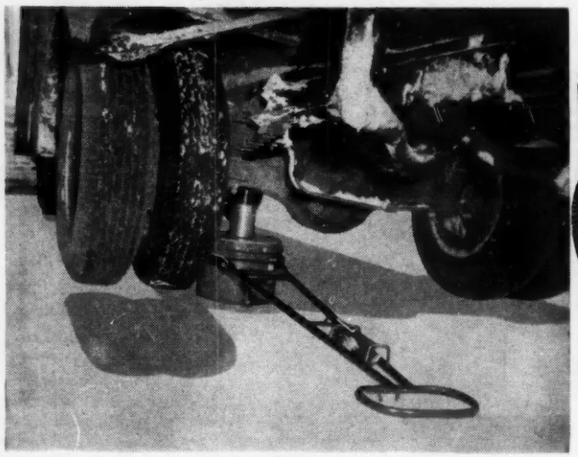
* Industry Division, Bureau of the Census.

Here is the New TRUCK JACK by Branick



that operates from your air line to lift truck axles like this with tremendous power* in 15 seconds for service.

* 160 lbs. jack air pressure lifts 9 tons, 100 lbs. 5 tons.



without crawling under truck to operate

The Branick Air Operated Truck Jack makes lifting of truck axles so fast and easy it outmodes the old conventional lifting methods.

You can raise and lower axle by finger tip control at end of long handle. Speeds up lifting of trucks for tire and brake service or mechanical work.

BRANICK AIR-OPERATED TRUCK JACK $189.25

WRITE FOR OUR COMPLETE CATALOG

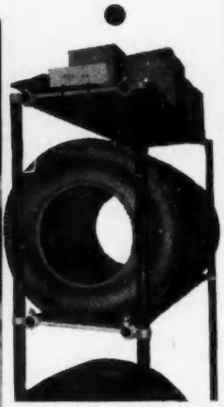
BRANICK PRODUCTS CO., INC.

Manufacturers of Curing Rims, Inflation Safety Cages, etc.

FARGO, N. DAK. CABLE: BRANICK, U. S. A.

TRUCK TIRE SAFETY INFLATION CAGE

Positive protection for the service man from blown-off side or lock rings when inflating truck tires.



TIRE RACKS OR SHELVING MADE QUICKLY WITH STANDARD PIPE

BRANICK STEEL TIRE RACK BRACKETS

No threads to cut—build to any length or height—stand alone. Made in three sizes to handle from ¾" to 2" std. pipe. Write for illustrated Tire Rack Bracket booklet.

All Exports Except Canada Write: Branick Manufacturing Export Co., 82 Beaver St., New York 5, N. Y.

Eastern Sales Office: 227 West Exchange St., Akron, Ohio Phone Blackstone 37042

Brink's banks on Genuine Ford Parts

"You don't trade-in an armored car yearly. The investment is too big and the 'used' market too small. So, low upkeep cost and long life are qualities we want in our rolling stock. That's why we keep our Ford trucks rolling with Genuine Ford Parts," says Thomas Scott, San Francisco Operation Manager of Brink's.

Like Brink's, fleet operators all over the country have found it *really* pays to standardize Ford fleet operations to Genuine Ford Parts. Here are two big reasons why:

First, Genuine Ford Parts are made to rigid specifications set by the same men who built the Fords in your fleet! Mechanics find Ford parts install "just right" the first time! *You'll* like the way costly down-time is cut way down, as a result.

Second, since Genuine Ford Parts are given grueling tests on Ford test tracks *before* being approved for manufacture . . . you can be sure your Fords will *stay* out of the shop longer and stay on the road . . . where the fleet profits are!

Brink's "protects" its fleet with Genuine Ford Parts

GENUINE Ford PARTS

KEEP YOUR FLEET ON ITS FEET

February News Roundup

Continued from Page 172

trucks. Steady increases in living standards are creating new jobs and more work for trucks to do.

Consolidated-Great Southern

Reported the *Wall Street Journal* middle of last month in its *Abreast of the Market* column under the heading *Heard on the Street*, "Negotiations for a merger of Ryder System, Inc. and Consolidated Freightways (both over the counter) are said to be underway." Ryder owns Great Southern Trucking Co. plus a chain of truck leasing companies, has been expanding its holdings in leasing recently. Consolidated now has pending before the Interstate Commerce Commission applications for purchase of eight truck lines plus partial purchase of another.

1955 Domestic Truck Factory Sales by G.V.W.*

	5,000 lb. and less	5,001-10,000	10,001-14,000	14,001-16,000	16,001-19,500	19,501-26,000	Over 26,000	Total
January	37,040	12,271	3,300	12,015	3,178	2,552	3,591	73,947
February	25,500	9,113	2,319	9,045	2,808	2,658	3,810	55,253
March	43,294	14,454	3,543	14,836	2,671	2,748	4,514	86,060
April	55,955	17,933	4,146	19,041	3,926	3,572	5,603	110,176
May	54,231	17,092	4,345	19,397	4,269	3,290	5,738	108,362
June	47,614	16,615	3,576	18,591	5,302	3,803	6,124	101,625
July	42,482	14,883	3,261	19,206	5,055	3,766	5,086	93,739
August	37,218	12,506	2,648	16,304	3,381	3,025	4,993	80,077
September	41,149	12,053	2,751	11,673	2,672	2,260	4,293	76,851
October	45,821	14,012	3,233	9,296	2,438	2,075	4,515	81,390
November	51,866	15,125	3,552	15,991	3,901	3,495	4,415	98,345
Total—11 Months 1955	482,170	156,059	36,674	165,395	39,601	33,244	52,682	965,825
Total—11 Months 1954	365,182	140,048	30,109	129,053	30,023	35,765	33,503	763,683

* Automobile Manufacturers Association.

STEWART-WARNER

TRUCK TACHOMETERS

Accurate! Positive electric drive assures accurate speed indications. Makes safer, more economical operation possible!

Dependable! Manufactured to highest standards of quality. Designed and engineered for long, reliable service. Vibration-proof . . . no flexible shafts, no oscillators to break or need repairs!

Easy to Install! No special tools or changes in vehicle's electrical system required. Will not affect engine spark or timing at any speed.

Easy to Read! Large 3" diameter, illuminated face dial. Steady pointer has full 270° travel for quick reading. Adjustable red markers help you stay inside "economy range."

★ *See your dealer or write:*

STEWART-WARNER
Instrument Division
Dept. DD-26, 1840 Diversey Parkway, Chicago 14, Illinois

. . . **Gunther G. Weinstock,** appointed insurance and claim prevention director, Yale Transport Corp., New York City.

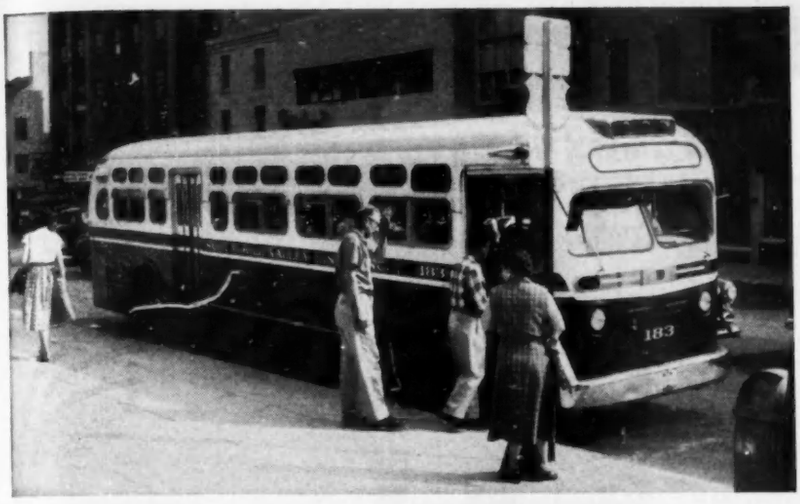
. . . **John Dyer,** named St. Louis, Mo., specialist, Service Recorder Co., Cleveland, Ohio.

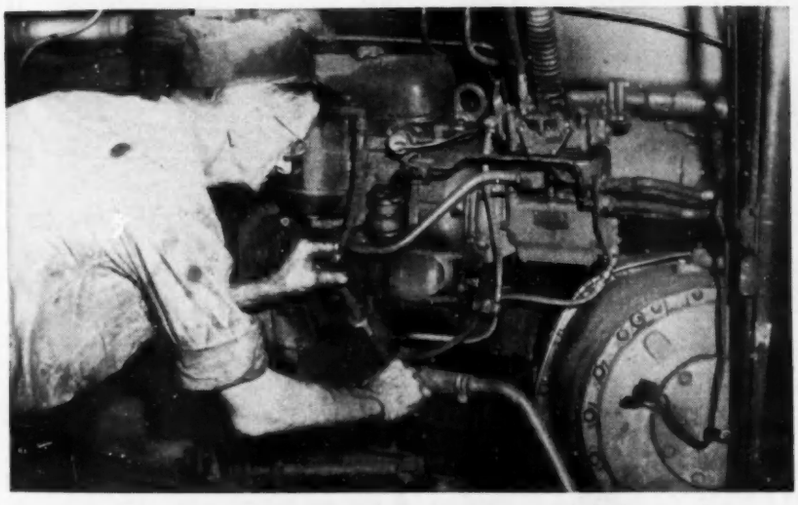
. . . **Daniel M. Sharpe,** left, and **Percy A. Leeper,** right, promoted to sales manager and service manager respectively, west central division (Chicago), Electric Auto-Lite Co., Toledo, Ohio.

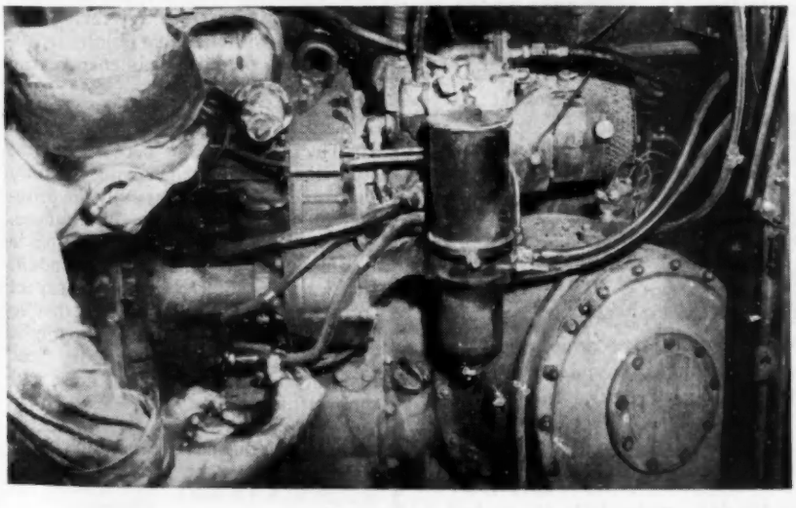
. . . **Chet D. Hirsch,** appointed service manager, and **Thurrell D. Lyle,** promoted to manager, southwestern sales division (Kansas City, Mo.), Allen Electric and Equipment Co., Kalamazoo, Mich.

. . . **Andrew J. O'Rourke,** promoted to vice president and manager, eastern division (Maspeth, Queens, N. Y.), **John T. Klein,** promoted to district manager, Kansas City, Mo., **John A.**

(TURN TO PAGE 200, PLEASE)







"Our Replacement Hose Lines are Aeroquip . . .

THEY'RE PRACTICALLY TROUBLE FREE"

Says Shop Foreman Edwin Karr, Schuylkill Valley Lines, Inc., of Norristown, Pa.

Aeroquip is the standard engine replacement hose for all Schuylkill Valley Line buses. Edwin Karr, shop foreman, reports ". . . Aeroquip is flexible, easy to install, and it takes continuous abuse without wear."

You'll save by making Aeroquip your replacement standard, too. Fuel, oil and water lines can be made easily by mechanics, using Aeroquip bulk hose and reusable fittings. Your Yellow Page Telephone Directory lists your local Aeroquip distributor, or write for Bulletin No. 151.

Aeroquip

REG. TRADEMARK

AEROQUIP CORPORATION, JACKSON, MICHIGAN

IN CANADA: AEROQUIP (CANADA) LTD., TORONTO 15, ONTARIO

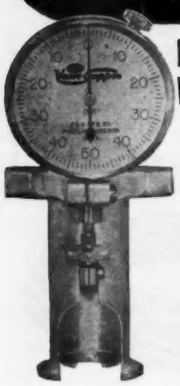
LOCAL REPRESENTATIVES IN PRINCIPAL CITIES IN U.S.A. AND ABROAD • AEROQUIP PRODUCTS ARE FULLY PROTECTED BY PATENTS IN U.S.A. AND ABROAD

TRUCK MECHANICS · OWNERS

Set Valve Clearance *Exactly Right!*

Every Time with

P&G Valve-Gapper



New Technique 100% Accurate

Now you can set valve clearance on most OHV gasoline and diesel truck engines uniformly and with micrometer accuracy instead of depending upon individual "feel".

Check these VALVE-GAPPER advantages:

- Reduces Valve Adjustment time as much as 50%.
- Eliminate Inaccuracies of Individual "Feel".
- No Change in Adjustment Procedure; ONLY Method of Measurement Differs.
- Serviceman can "SEE" Clearance on Dial Indicator BEFORE, DURING and AFTER adjustment.
- Both Hands FREE to Use Adjusting Tools.
- Use Dial Indicator for Other Shop Tasks.

Models Available to fit these Truck Engines:
GM DIESEL • GMC GASOLINE
CUMMINS DIESEL
INTERNATIONAL HARVESTER
FORD • CHEVROLET
DODGE • REO • OTHERS

BOTH HANDS FREE

Service man always has both hands free to use adjusting tools —he can "see" exact clearance before, during and after adjustment.

Order From Your Jobber or Write

P&G MANUFACTURING CO., Dept. 7-B
305 N. E. Russell St., Portland 12, Oregon
Please send me Valve-Gapper literature and prices.

Firm Name_____
Your Name_____
Address_____
City_____ Zone____ State_____
Engines Serviced:
☐ Passenger Car ☐ Diesel
☐ Gas Truck ☐ Gas Industrial
My Jobber is:_____

February News Roundup

Continued from Page 174

Sloan, promoted to district manager, Omaha, Nebr., and **J. L. Schroeder**, promoted to branch manager, Houston, Texas, Mack Trucks, Inc., New York Cty.

. . . **Duane F. Kuntz**, promoted to assistant manager, motor truck sales, motor truck division, International Harvester Co., Chicago.

. . . **Philip J. McNamee**, bus service manager, International Airport, San Francisco, Cal.

. . . **Max R. Jensen**, appointed vice president, Consolidated Freightways, Portland, Ore.

. . . **Robert L. Wicker**, appointed sales manager, Federal Motor Truck Division, Napco Industries, Inc., Minneapolis, Minn.

. . . **M. L. Parker, Jr.**, appointed bus manager, Atlantic Division (Philadelphia), Mack Trucks, Inc., New York City.

. . . **Sal Colacuori**, promoted to motor truck development sales supervisor, **N. L. Ginder**, promoted to motor truck sales engineering general supervisor, **Wayne A. Riggs**, transferred to Southwest regional manager, **Robert L. McCaffrey**, promoted to Northwest regional manager, **T. D. Mescall**, transferred to New York City motor truck district assistant manager, and **John W. Merrill**, named Manchester, N. H., branch manager, motor truck division, International Harvester Co., Chicago.

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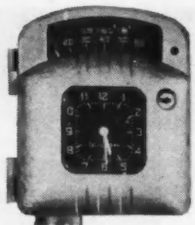
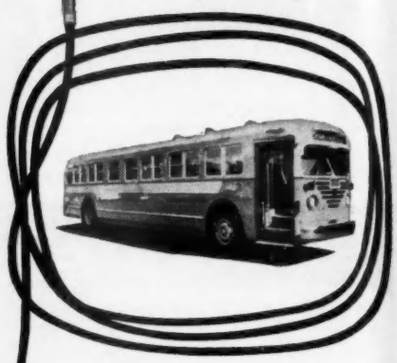


230,000 maintenance-free miles!



DE CAMP BUS LINES breaks all records with TELEFLEX® Tachograph linkage

More than 230,000 rugged tachograph miles have been logged by a 45-foot, one-piece Teleflex Tachograph cable on a bus belonging to De Camp Bus Lines, Clifton, New Jersey. Together with four other buses from the fleet, De Camp has experienced more than a million miles from its Teleflex Tachograph Linkages—without cable failure, repair, lubrication, or other maintenance. And *all* are still going strong!

You can have the same results—for truck fleet, or bus fleet operations. Teleflex is a high-strength cable uniquely designed to tackle successfully the problem of downtime due to cable failure. Operating in its own precision-made flexible or rigid and flexible conduit, Teleflex gives you the service you expect from your Tachographs. When they're Teleflex equipped—your Tachographs are *always* on the job, making fleet operations more economical, safer, and more efficient.

REMEMBER! Your next Tachograph cable replacement can be the last—if you replace with Teleflex!

FOR DETAILS OF TELEFLEX TACHOGRAPH INSTALLATIONS—

WRITE for the Tachograph linkage bulletin; Teleflex Incorporated, 125 S. Main Street, North Wales 2, Pa.

TELEFLEX
MECHANICAL CONTROLS
LINKAGES MECHANISMS

Don't file your fleet problems

SEE YOUR UNITED MOTORS DISTRIBUTOR TODAY

——————he can help you cut maintenance costs!

Face 'em; don't file 'em. There's a practical answer to fleet maintenance costs as near as your telephone. The man with the answers is your UMS distributor. His job goes beyond stocking and selling automotive parts. He is familiar with fleet operations and knows how to keep your trucks on the road where they belong.

He carries large stocks of parts by General Motors. Parts with a fine reputation for cutting maintenance costs to a minimum.

Call your United Motors Distributor soon. He's got the knowledge and the parts to take a lot of your fleet problems off your desk.

Almost half of America's vehicles use these parts by General Motors. Available through independent distributors everywhere.

GM
GENERAL MOTORS
PARTS SALES

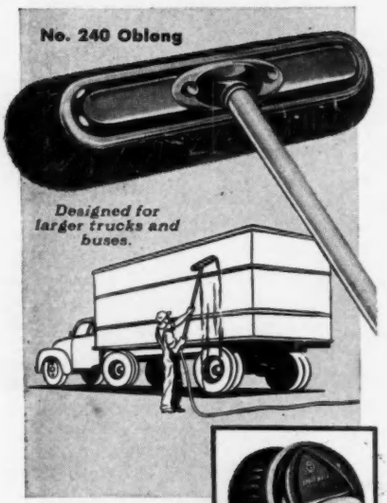
UNITED MOTORS SYSTEM

TUNE IN | **ON TV**.....Spectacular "Wide Wide World," NBC-TV Network.
ON RADIO.....Lowell Thomas Newscast on CBS Network.
See your local listings for time and station.

Almost half of America's cars use these General Motors original equipment parts:

Chassis and engine parts for BUICK, CADILLAC, CHEVROLET, GMC, OLDSMOBILE, PONTIAC • HARRISON radiators • DELCO batteries MORAINE engine bearings • DELCO automotive motors • KLAXON horns • AC gauges, speedometers • MORAINE gasoline filters DELCO shock absorbers • ROCHESTER lighters • NEW DEPARTURE ball bearings • HYATT roller bearings • HARRISON thermostats ROCHESTER carburetors • DELCO-REMY starting, lighting, ignition • DELCO brake parts and fluid • SAGINAW steering • GUIDE lamps PACKARD cable products • INLITE brake linings • GM Hydra-Matic units and parts • DELCO electronic parts

SPEED WASH Outlasts 3 Ordinary Fountain Brushes



No. 250 Round
Ideal for small trucks, passenger cars.

NOT even three ordinary fountain brushes can match the long lasting performance that results from the superior construction and design of Speed Wash. Soft, resilient bristles (50% Nylon, 50% Select Horsehair) can't mat or tangle. Tufts are molded into block, can not come out or come loose. Steel back is waterproof and surrounded by a mar-proof bumper. Handle is zinc plated inside and out. Features like these make Speed Wash the quality brush of the trucking industry, preferred by thousands of the nation's biggest fleet operators. You'll like Speed Wash, too. Order yours today.

PRICES EITHER STYLE				
Complete with 5 ft. handle	IN LOTS OF: 1	6	12	24
	$12.45	$11.65	$10.90	$10.15

MILWAUKEE DUSTLESS BRUSH CO.
530 North 22nd St., Milwaukee, Wis.

Please ship the following:

Quan.	No.	Item	Price
	240	OBLONG SPEEDWASH	
	250	ROUND SPEEDWASH	

NAME_____

ADDRESS_____

CITY_____ STATE_____

February News Roundup

Continued from Page 200

. . . **Robert Westcot,** named maintenance and equipment superintendent, Rail-Trailer Co., Chicago. He was with Trailmobile, Inc.

. . . **James B. Spice,** appointed safety supervisor, General Expressways System, Chicago.

. . . **James A. Murray,** appointed associate general counsel, Interstate Commerce Commission, Washington, D. C.

. . . **Walter Biedzynski,** promoted to freight claim agent, Davidson Transfer and Storage Co., Baltimore, Md.

. . . **Ross Miller,** appointed Gar Wood - St. Paul Frate-Gates sales manager, Gar Wood Industries, Inc., Wayne, Mich.

. . . **C. A. Burke,** promoted to Philadelphia retail branch manager, motor truck division, International Harvester Co., Chicago.

. . . **Charles E. Lambert,** appointed sales manager, and **L. J. Hauskey,** appointed assistant sales manager and Minneapolis, Minn., branch manager, Grant Storage Battery Co., Cleveland, Ohio.

. . . **Frank E. Draper,** promoted to vice-president—National Sales Division, Sun Electric Corp., Chicago.

. . . **Howard R. Canada,** named parts and service director, Four Wheel Drive Auto Co., Clintonville, Wis.

. . . **E. W. Atkinson,** appointed sales representative, Gould-National Batteries, Inc., St. Paul, Minn.

. . . **Robert W. Tyson, Jr.,** promoted to vice-president, Bus Division, Mack Trucks, Inc., New York City.

. . . **A. Dewey Williams,** appointed sales engineer, Great Dane Trailers, Savannah, Ga.

. . . **J. L. Hill,** appointed Buffalo, N. Y., factory branch manager, Reo Motors, Inc., Lansing, Mich. He was

(TURN TO PAGE 204, PLEASE)

4 ACES WHICH CAN'T BE BEAT!
Andrews TRAILERS and TRUCK BODIES

For top quality, lightweight, low cost aluminum trailers and truck bodies see Andrews! Custom built at standard prices. Record low maintenance costs. No paint, no rust aluminum bodies. Whether you need one or one hundred call today for Andrews prices.

Andrews
TRAILERS and TRUCK BODIES
P.O. Box 418 St. Louis, Mo.

Universal Mounting Mirror No. 1270S
Panoram Mirror No. 1226
Patented Strut No. 1201
Fender Mounting Mirror No. 1285
Universal Mounting Mirror No. 1276
Body Mounting Mirror No. 1265
Heavy-Duty Strut No. 1202
Truck mirrors have been steadily improved for ruggedness and serviceability. Anthes improvements are reflected in these HEAVY DUTY MIRRORS covering a variety of sizes and mountings.
THE FIRST LINE OF SAFETY
Anthes
ANTHES FORCE OILER COMPANY • FORT MADISON, IOWA

INDUSTRIAL HOSE AND FITTINGS

Super resistance to abrasion and corrosion makes this hose excellent for railroads, road equipment, farm machinery, and materials handling equipment. High tensile strength single wire braid. Tough synthetic rubber cover. Working pressures to 2500 psi. Bulk hose and fittings . . . complete hose assemblies at your dealer.

Write for BULLETIN
Dealerships open in some areas.

STRATOFLEX

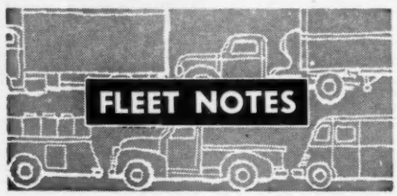
STRATOFLEX, INC. FORT WORTH, TEXAS
P. O. BOX 10398

BRANCH PLANTS
LOS ANGELES AND TORONTO
SALES OFFICES
ATLANTA • CHICAGO • NEW YORK • SAN FRANCISCO
DAYTON • HOUSTON • KANSAS CITY • PORTLAND • TULSA
IN CANADA
STRATOFLEX OF CANADA, INC. TORONTO 18, ONTARIO

February News Roundup

Continued from Page 202

Syracuse, N. Y., manager, Autocar Division, White Motor Co.



Texas-Arizona Motor Freight Lines, El Paso, Texas, has added 30 new Kenworth tractors to its fleet. They have 200-hp Cummins diesel engines and Fuller "Roadranger" transmissions. Wheelbase is 189 in., and from back-of-cab to centerline of rear axles they measure 98 in.

Greyhound Corp., Chicago, has completed a contract to purchase the 44.3 per cent common stock interest in **Northland Greyhound Lines** held by Great Northern Railway Co. Northland will eventually be incorporated as an operating division of Greyhound Corp.

S & W Motor Lines, Greensboro, N. C., has announced a half-million dollar expansion program including purchase of 25 International "tilt-cab" Model No. 205 tractors equipped with Cummins' JT-6-B 175-hp turbocharged diesel engines. Twenty-five Strick 35-ft, high volume trainers are also on order.

Olson Transportation, Green Bay, Wis., has installed RCA mobile radio at its Chicago terminal. System includes a 15-watt base station and mobile radios in 75 PU & D trucks. The fleet expects to save about $10,000 a year through greatly reduced phone charges.

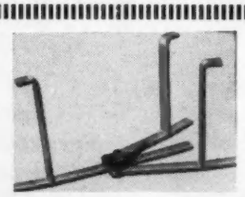
Freihofer Baking Companies, Philadelphia, has added 362 International trucks to its 1000-truck fleet. Included in the purchase are 250 light duty models with 7-ft Metroette bodies, 108 Model Nos. RM-122 and SM-122 with 9½-ft flatback Metro bodies and 4 R-195 Roadliner tractors.

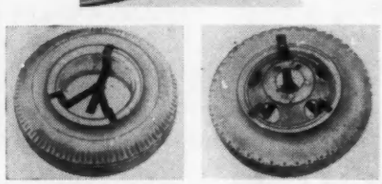
Watson Bros. Transportation Co., Omaha, Nebr., in cooperation with the Butternut Coffee Christmas Club, delivered thousands of boxes of Christmas toys and presents to children in several midwestern institutions and homes.

Frank L. Thomas, Dallas, Texas,
(TURN TO PAGE 206, PLEASE)

Brand Name and Numeral Identification on Your Tires

NEW





Increase tire mileage up to 40% by keeping accurate tire mileage records.

EVERHOT SAFETY CLAMP

- **ELIMINATES DANGER** of exploding lock rings during inflation.

Don't risk the expense and serious injury which can be caused by an exploding lock ring. Positive 3-point grip of the Everhot Safety Clamp (applied to tire in five seconds) assures complete protection. Equally satisfactory for any style rim. Get full details today and special low introductory price. Jobber inquiries invited.

Accurate tire mileage records, possible only through branded identification give you the complete story on every tire in your fleet . . . tell you where valuable savings can be made. Consider branding today. Get full details by writing for free sample set of tire mileage record forms and prices on tire branders.

EVERHOT MANUFACTURING COMPANY, MAYWOOD, ILLINOIS

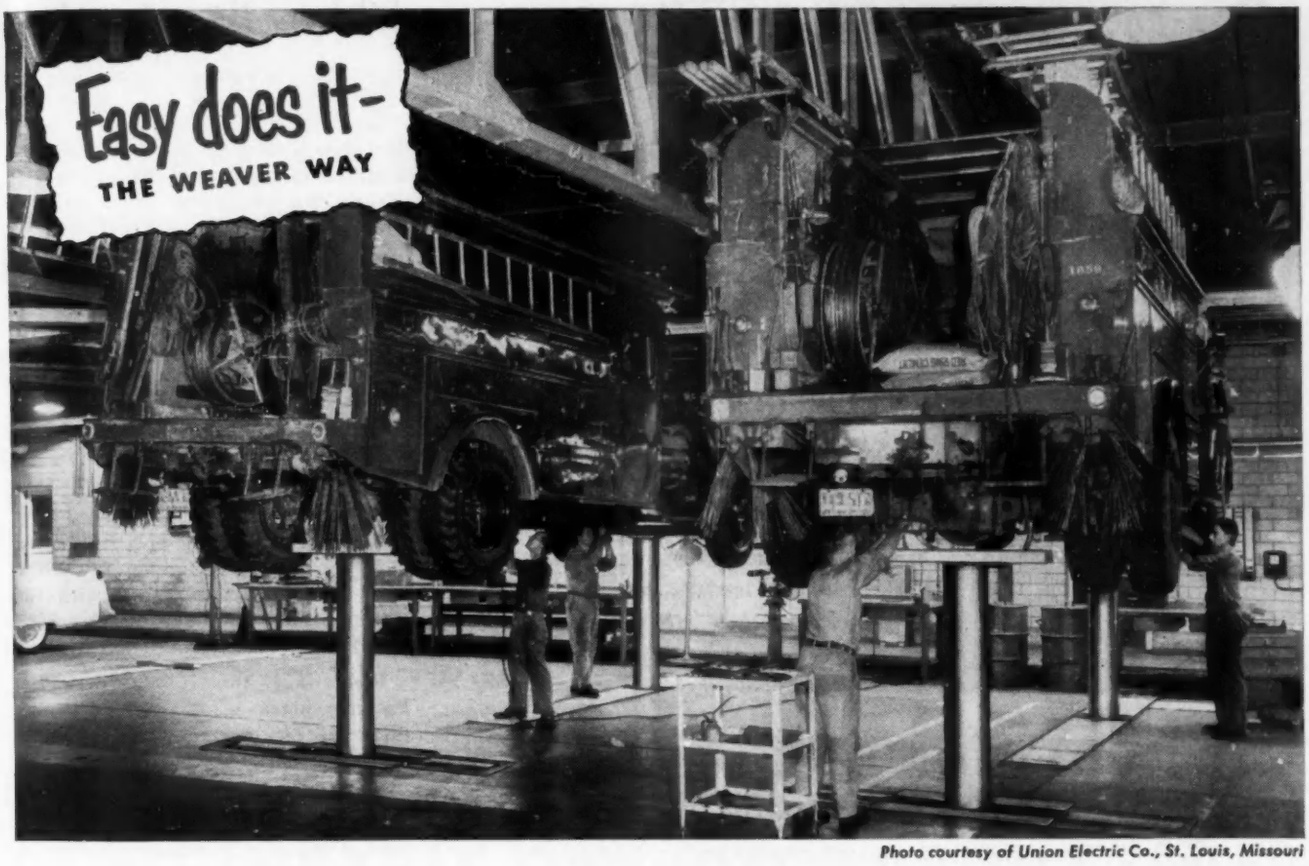


Photo courtesy of Union Electric Co., St. Louis, Missouri

WEAVER TWIN POST LIFTS

handle the "heavyweights" with ease

Heavily loaded electrical service trucks, giant transports, huge transcontinental coaches, and all other heavy vehicles *go up* quickly and safely on Weaver Heavy Duty Twin Post Lifts. These lifts have a 24,000 lb. to 36,000 lb. load capacity and are the only automotive type lift that can handle all wheel base lengths without loss of lifting capacity.

Twin Post Lifts raise vehicles by the axles, thus giving mechanics free, unobstructed access to every under-chassis point — THERE ARE NO RAILS IN THE WAY! Mechanics can work in convenient standing position and roll tool stand within easy reach (see illus.). Such working efficiency speeds production from 25% to 100% according to actual time study reports. That means less "down time" . . . lower fleet maintenance costs.

Heavy Duty Twin Post Lifts are regularly furnished with wheel base capacity of 102" minimum and 204" maximum unless otherwise specified. Available air-oil or electric-oil operated. For further details, see your Weaver Jobber or write us for Bulletin CCJ-457.

WEAVER

WEAVER MANUFACTURING CO., SPRINGFIELD, ILL., U. S. A.

SERVICE SHOP EQUIPMENT

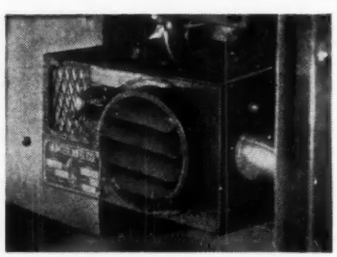
Complete Weaver line includes: Twin Post Lifts . . . Single Post Frame Type Lifts . . . Unit Lifts . . . Bumper Lift . . . Car Washers . . . Wheel Alignment Equipment . . . Headlight Testers . . . Brake Testers . . . Wheel Balancing Equipment . . . Jacks . . . Wheel Dollys . . . Air Compressors.

An Important Man

DESERVES THE BEST

HUNTER Gasoline-Burning Heaters

FOR GAS OR DIESEL RIGS



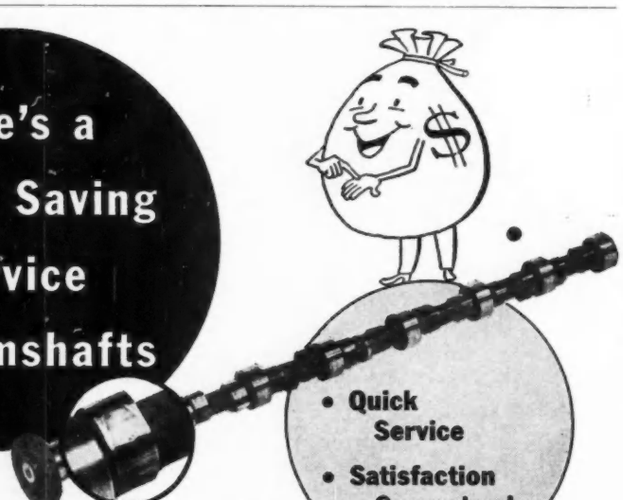
- Sure safe heat, thermostatically controlled
- Shirtsleeve warmth in coldest weather
- Sub-zero starting, unfailing combustion
- Conform to all ICC regulations
- Operate independent of vehicle engine
- Eliminate costly engine idling
- Economical, compact, easy to install

Write for descriptive literature, specifications, prices.

HUNTER MANUFACTURING CO.

1550 EAST 17th STREET, CLEVELAND 14, OHIO

Here's a Money Saving Service on Camshafts



- Quick Service
- Satisfaction Guaranteed

Standard's exclusive camshaft service reconditions worn camshafts — good as new in specifications, performance, and service — at a considerable saving to you. A Mack Model 672, for instance, is reconditioned for about $30.00.

Standard's "Chromaloy" process and technique have been thoroughly tested and proven on hundreds of thousands of camshafts of all sizes. Some of America's largest truck transportation firms have been using this service without a single failure of any kind.

Let us give you full details and prices, or send us a worn camshaft to recondition.

Standard Crankshaft & Hydraulic Co., Inc.

2917 Roxzells Ferry Road, Charlotte, N. C., Phone: FR 6-2374 — 5-3469

February News Roundup

Continued from Page 204

has just enlarged its fleet with the addition of eight new Model No. 521 Kenworths equipped with 180-hp diesel engines.

Watson Bros. Transportation, Omaha, Nebr., announces through trailer service in coordination with **Lee-Way Motor Freight** and **Sooner Freight Lines.**

Adley Express, New Haven, Conn., has ordered $1 million worth of new equipment including 75 tractors, 20 straight trucks and 57 trailers.

Silver Fleet Motor Express, Louisville, Ky., is spending $1¼ million on new equipment including 28 White 9000 TD tractors equipped with the 175-hp, JT6B Cummins diesel engine and 100 Fruehauf high cube trailers.

Rodgers Motors Lines, Scranton, Pa., in place of giving Christmas gifts to customers, gave $4000 to local and national charitable organizations.

Consolidated Freightways, Portland, Ore., is putting into service a fleet of highway safety and courtesy vehicles, will cooperate in trucking industry cooperative safety patrols.

Overnite Transportation, Richmond, Va., has begun service to over 100 additional points in South Carolina and Georgia.

Southern Plaza Express, Dallas, Texas, reports that its PU&D fleets in St. Louis, Mo., and Dallas are being equipped with 2-way radio. Its PU&D fleet in Chicago is presently using 2-way radio and plans are being made to put the service in at Houston and San Antonio, Texas, Kansas City, Mo., and Memphis, Tenn. Application has been made to the FCC for the Fort Worth PU&D fleet.

Fleets awarding their outstanding, safe drivers recently include:

Virginia Trailways, Washington, D. C.—to two drivers. They both have over one-million mile records.

Holland Motor Express, Holland, Mich.—to 21 drivers. Their total "no

(TURN TO PAGE 208, PLEASE)

NO WOBBLE in the NEW Firestone

DEMOUNTABLE ONE-PIECE DROP CENTER RIMS FOR TUBELESS TRUCK TIRES

Never before has a rim been precision engineered to such close tolerances. The exclusive Firestone Mounting Ring is built for the tightest fit possible before being pressed and then welded to the rim. This assures a perfect rolling wheel . . . prevents any wobbling!

Let us show you all the advantages of Firestone Tubeless Truck Tire Rims . . . you'll want to specify them on your new trucks or when you change your present equipment over to tubeless tires.

INCREASED PAYLOAD . . .
Up to 108 lbs. Less Weight Per Axle

ABSOLUTELY SAFE . . .
No Rings to Blow Off . . . No Tire Run Off

SIMPLIFIED SERVICE . . .
Easy to Mount as a Passenger Car Wheel Assembly

INTERCHANGEABLE . . .
Mates with Conventional Rims on Dual Wheels

For Further Information Call or Write the . . . **FIRESTONE STEEL PRODUCTS CO.** Akron 1, Ohio
or your nearest rim distributor

Look to LEE to Solve Your TRUCK LIFTING PROBLEMS

The LEE Truck Lift
Operates anywhere air pressure is available • eliminates need for special pits • makes an ideal auxiliary hoist • NEW cutaway frame permits access to restricted front axle clearance.*
Own a LEE Truck Lift for only $18.16 a month after only $42.50 down. With Commercial Credit Corporation's time payment plan you can put your LEE to work right now.
LEE LIFT
*
Ask Your Jobber or Write:

AUTOMOTIVE EQUIPMENT MFG. CO. 11000 SO. ALAMEDA ST. LYNWOOD, CALIFORNIA

more miles per dollar!

Bendix*

ELECTRIC FUEL PUMP

for trucks, buses and passenger cars

Learn more about this new and improved fuel pump.
Write for descriptive folder and specifications.

WRITE DEPARTMENT B

*REG. U. S. PAT. OFF.

ECLIPSE MACHINE DIVISION ELMIRA N. Y. Bendix AVIATION CORPORATION

BUY BONDS

February News Roundup

Continued from Page 206

accident award record" amounted to 116 years.

N & W Transport, Alma, Mich.—to 39 drivers. They shared in a $7600 safe driving bonus, with individual drivers receiving amounts ranging from $7 to $500.

Mercury Motorways, South Bend, Ind.—to 56 drivers. Total record of the group was 235 years, with six having individual records of 10 years or better of safe truck driving.

Tamiami Trail Tours, Tampa, Fla. —to eight truck drivers. One of them has a record of 15 years without a chargeable accident.

Pittsburgh & New England Trucking, McKeesport, Pa.—to two drivers. They were chosen as company "drivers of the year" for the fleet's eastern and western divisions.

Inland Motor Freight and **Pacific Highway Transport,** Spokane, Wash. —to 306 drivers. Total record represented 1785 years, over 52 million miles of safe truck driving.

Watkins Trucking, Uhrichsville, Ohio—to eight drivers. They also received cash bonuses for their safe driving efforts.

Topeka Transfer & Storage, Topeka, Kan.—to 14 drivers. Three of them have individual records of 17 years or more.

Spector Freight System, Chicago, announces that 25 of its Norwalk, Ohio, highway drivers have run up 500,000 safe truck driving miles, are aiming at the million mile mark.

Champion Spark Plug Co., Toledo, Ohio, plans a new 100,000 sq ft plant to be located in Burlington, Iowa. It will be operated by a wholly owned subsidiary, **Iowa Industries.**

Plymouth Division, Chrysler Corp., reports production of its taxicab model at over 3200 since its introduction on Oct. 21, 1955, 1½ times

(TURN TO PAGE 210, PLEASE)

FOR ENGINE VALVES

You can count on Thompson

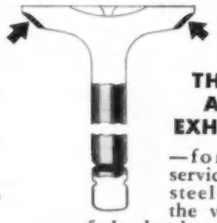
THOMPSON PRODUCTS has specialized in engine valves for over 50 years. Thompson valves are the result of the same engineering, metallurgy and manufacturing skills that produce the world's finest aircraft engine valves. In the Thompson line you'll find the valve you need for any job—the replacement valve that gives your customers best value for their money every time.

THOMPSON "S" EXHAUST VALVE

—the world's best-known exhaust valve for cars, trucks, buses and tractors. Made from a variety of fine heat and wear-resisting valve alloys, because different valve alloys are required for different engines. Thompson "S" exhaust valves are your best bet for regular installation.

THOMPSON SODIUM-COOLED EXHAUST VALVE

—this super exhaust valve is used as original equipment by leading manufacturers of heavy-duty automotive engines. It is an adaptation of Thompson sodium-cooled aircraft engine valves. The sodium in the hollow stem rapidly drains the heat from the valve head into the cooling system.



THOMPSON AEROTYPE EXHAUST VALVE

—for heavy-duty service. Aircraft valve steel—armored on the valve face with one of the hardest known alloys, developed by Thompson metallurgists. Used by leading manufacturers as original equipment. Recommended for replacement in trucks, buses and tractors where resistance to wear, burning and battering is a prime consideration.

Sell the complete line of

THOMPSON ENGINE AND CHASSIS PARTS

The Original Equipment Leaders

See your Thompson Products Jobber

THOMPSON SERVICE SALES
2209 Ashland Road • Cleveland 3, Ohio

Truck Wheel Changes
—a one-man job
with JOB-DESIGNED KEN-TOOL
IMPACT WRENCH SETS

Ken-Tool Impact Wrench Handles swing freely through a 120° arc . . . strike with tremendous force. Loosen rusted, frozen nuts fast. Long shaft keeps handle clear of truck or bus bodies.

TR-42 Set
5-piece Impact Wrench Set for all Ford and Budd Wheels.

TR-41 Set
10-piece Impact Wrench Set for 90% of popular trucks.

TR-40 Set
18-piece set—Impact Wrench Set, plus 9 Ken-specialized Tire Changing Tools.

TX-9
Budnut Wrench, a "must" for Budd and Ford wheels. Holds outer cap nut while turning inner. No chiseling necessary.

SEE YOUR JOBBER on the complete line of *Job-Designed* Ken-Tools. Forged by the largest exclusive manufacturer of top-quality Tire-changing Tools and Equipment. THE KEN-TOOL MFG. CO., AKRON 5, OHIO.

JOB-DESIGNED KEN-TOOLS
TIRE-CHANGING TOOLS KNOWN, USED AROUND THE WORLD

"BOS" HYDRAULIC TRUCK TIRE DEMOUNTER

$89.50
Higher West of Rockies

removes, safely and easily, frozen or stuck casings from rim in minutes. Features Hein-Werner Hydraulic unit. Handles all size truck tires, wheels and rims.

MAIL ORDERS OR REQUESTS FOR FURTHER DETAILS TO
JACK P. HENNESSY SALES CO.
12 DEPOT SQUARE • ENGLEWOOD, N.J.

February News Roundup

Continued from Page 208

greater than a comparable period a year earlier.

Warner Electric Brake & Clutch Co. plans a new $1 million plant for its automotive division. Located just south of Beloit, Wis., it should be finished some time in July.

Reliance Division, Eaton Mfg. Co., will expand its Massillon, Ohio, facilities about 30 per cent.

Choldun Mfg. Co., New Haven, Conn., has just completed an order to supply Post Office garages throughout the country with vehicle washers. Feature of the new unit is a special attachment for washing wheels and tires.

Babaco Alarm Systems, Inc., New York City, has appointed **Magneto Specialty Works,** Denver, Colo., as its agency in that area.

Gar Wood Industries and **St. Paul Hydraulic Hoist** have combined lines. Equipment will carry the name plate "Gar Wood—St. Paul."

Firestone Tire & Rubber Co., Akron, Ohio, has split its Southern division. J. E. Davis heads the new Southwest division with offices in Houston, Texas. W. S. McGilvray has been named manager of the new Southeast division with headquarters in Atlanta, Ga.

Reo Motors, Inc., Lansing, Mich., has begun a nation-wide "face lifting" program of its factory branch network. Branches in Buffalo, N. Y., Pittsburgh, Pa., Oklahoma City, Okla., Wichita, Kan., Denver, Colo., and San Francisco, Cal., have been moved to provide expanded facilities.

Zollner Corp. is the new name of **Zollner Machine Works,** Fort Wayne, Ind.

Galion Allsteel Body Co., Galion, Ohio, announces appointment of **Maday Body Works,** Buffalo, N. Y., as its western New York distributor.

Trailmobile, Inc., Cincinnati, Ohio, has converted its Berkeley, Cal., plant to CID (customer individualized design) production.

White Motor Co., Cleveland, Ohio, announces the expansion and modernization of its San Jose, Cal., distributorship.

Purolator Products, Inc., Rahway, N. J. announces that **Industrial Wire Cloth Products Corp.,** Wayne, Mich.,

(TURN TO PAGE 213, PLEASE)

There are now 120 Water Pumps in our line
Wohlert Corporation
LANSING 5 MICHIGAN

the secret of our good jobs
LOU'S GARAGE
STANT CAPS

W. G. B. makes OIL FILTERS
from 60 to 750 Cu. In. Capacity
. . . and Cartridges for all makes of Filters.
Write for Details
W. G. B. OIL CLARIFIER, INC.
First By Test Since 1931 KINGSTON, N. Y.

MOTOR TRUCKS
CRANE CARRIERS
CUSTOM BUILT CHASSIS
GENERATOR SETS
DUPLEX
TRUCK COMPANY
LANSING, MICHIGAN

for greatest overall economy
WAUKESHA ENGINES
DIESEL • GASOLINE
NATURAL GAS • LP GAS

February News Roundup

Continued from Page 210

has become a wholly owned subsidiary of Purolator.

Champion Spark Plug Co., Toledo, Ohio, announces it has hired several leading race drivers to instruct high school students in safe operation and maintenance of automobiles.

Recent activity among the various states affecting commercial vehicle operation includes:

Kansas—The state has no legal way to pay back fleet operators the funds deposited by them in excess of the money due on the state's ton-mile tax. The tax was repealed effective Jan. 1, 1956, but at the same time provision for refunding the monies was also repealed.

Michigan — The state's legislature will debate a ton-mile tax this year and probably a 2¢ per gal increase in diesel fuel tax. Local justices of the peace are collecting fines from truck operators for failure to comply with "gauge" restrictions. Regulation is that the truck's "gauge" (distance from center of right tire to center of left tire at the tread) must be marked in letters at least 3 in. high on all units of 3500 lb and over.

North Carolina—The state's fuel use tax is now in effect. It requires operators to pay 7¢ per gal state tax on fuel used in the state, provides credit for fuel purchased in the state on which the tax is paid.

Pennsylvania—Revision of the state's motor vehicle code is reported to be underway. Recommendation for changes are to be made to the 1957 legislature. New law, H1747, permits use of trailer license plates one month in advance of the registration year providing the vehicles were registered the year before.

END

Pease Resume Reading Page 96

FRINK
SNO-PLOWS
Both "V" TYPE and
ONE WAY BLADE TYPE
hand or power hydraulic control
FOR ALL MOTOR TRUCKS
FROM 1½ to 10 TONS
FRINK SNO-PLOWS, INC., CLAYTON, 1000 Isl., N.Y.
FRINK SNO-PLOWS OF CAN. Ltd., TORONTO, ONT.

KINNEAR
STEEL ROLLING DOORS
Most of the world's goods pass through one or more Kinnear Rolling Doors before reaching their destination.
KINNEAR
ROLLING DOORS
The KINNEAR Mfg. Co. 2100 Fields Ave. Columbus 16, Ohio

Classified Advertisements

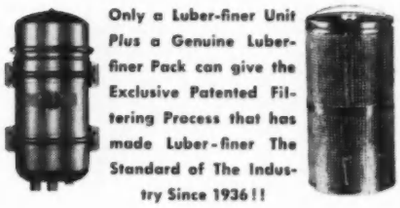
TRUCK DECALS—unusually low-priced, printed in plastic colors to give more brilliance, longer life. No charge for sketch in color. Representatives wanted—write for samples. Allied Decals, Inc., 8420 Hough Avenue, Cleveland 3, Ohio.

FOR SALE — 25 #3100 Series Trolley Coaches; 20 PCC Trolley Cars. Excellent Condition. For information apply to New York City Transit Authority, Purchasing Department, 370 Jay Street, Brooklyn 1, N. Y. Tel. ULster 2-5000—Ext. 4139.

USE ONLY GENUINE

Luber-finer

DIESELPAKS



Only a Luber-finer Unit Plus a Genuine Luber-finer Pack can give the Exclusive Patented Filtering Process that has made Luber-finer The Standard of The Industry Since 1936!!

THERE'S A LUBER-FINER MODEL FOR EVERY TYPE OF ENGINE— EVERY TYPE OF OIL!!

LUBER-FINER PACKS AVAILABLE

1. REFINING PACK

Introduced to the public in 1935 for use with straight mineral oils, fuel oils, hydraulic oils, and inhibited industrial oils.

2. DIESELPAK

First made available in 1941, the DIESELPAK was primarily designed for use with H.D. detergent compounded oils and has also achieved outstanding results when used with fuel oils and straight mineral oils.

DON'T BE MISLED BY PRICE ALONE!

There is no substitute for DIESELPAK'S Patented Filtering Process for H.D. Compounded oils AT ANY PRICE!

The DIESELPAK cleans more oil faster —keeps it CLEAN longer—and gives more service and better engineered protection than ANY of the substitute filtering elements being offered for Luber-finer units.

IT PAYS TO GET THE BEST!

STANDARD OF THE INDUSTRY SINCE 1936

Luber-finer Units are Standard and Optional Equipment on America's Leading Diesel Trucks, Tractors, Stationary Engines.

Write for Complete Information to Dept. 13

LUBER-FINER, INC.
2514 S. Grand Ave., Los Angeles 7

Now a new **TDA**® *lightweight tandem that features . . .*

UNEQUALED PARTS INTERCHANGE-ABILITY

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true,
scrapi
will n
Often
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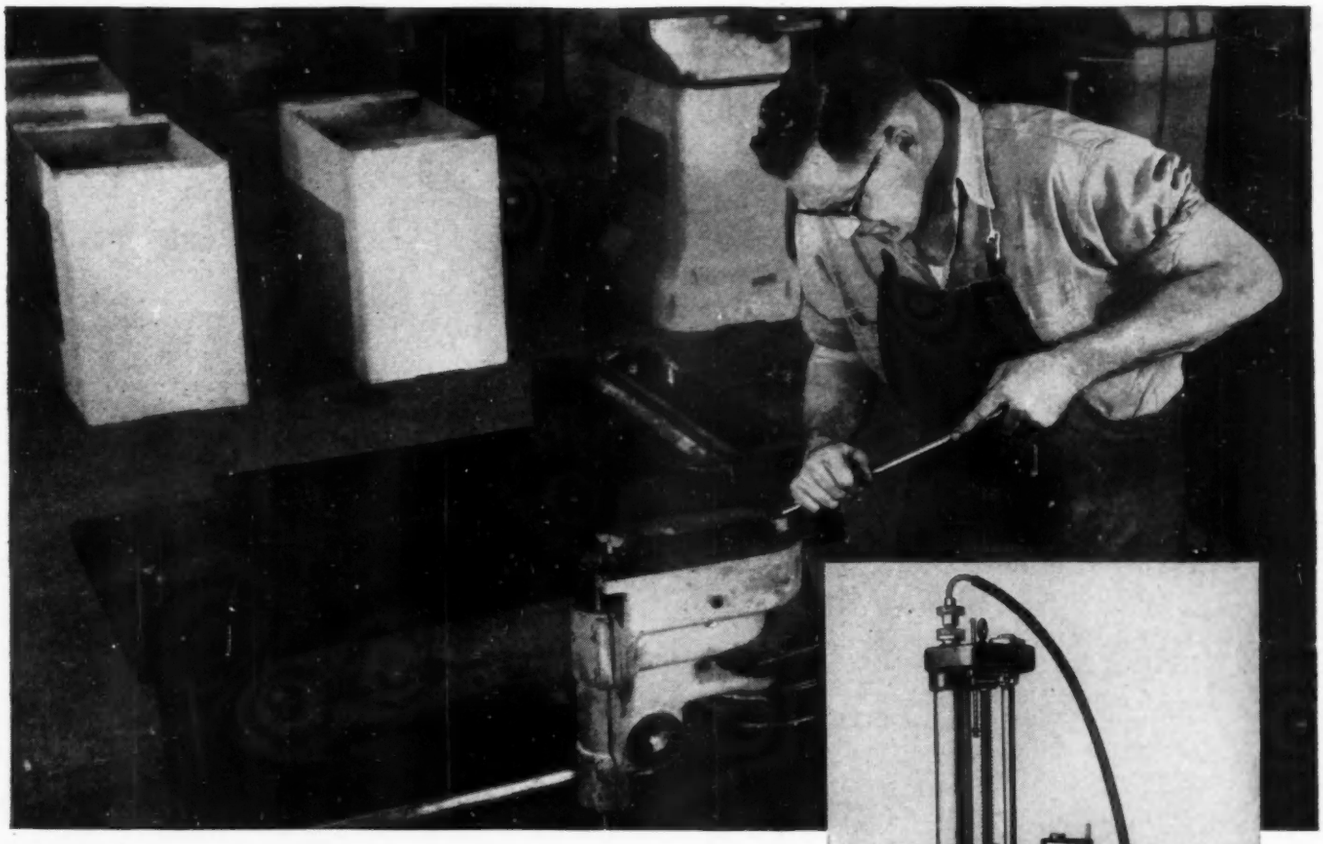
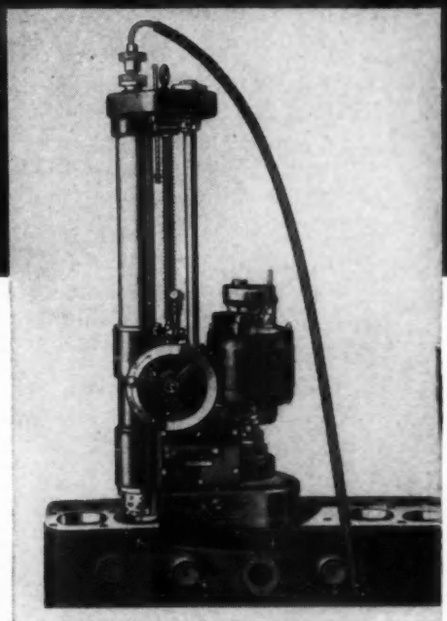
COMMERCIA

Another reason why Kwik-Way machines last longer, assure precision





Removing 1/10,000th inch of metal by hand

The critical surfaces of every Kwik-Way machine are hand scraped. An important reason why Kwik-Way Cylinder Boring Machines produce true, straight cylinder walls completely free from taper. *Only hand scraping by expert craftsmen* can insure that the base of the machine will make a perfect right angle to the center line of the boring sleeve. Often the amount of metal removed by this process measures no more than one ten thousandth of an inch. But this tiny fraction of an inch can mean the difference between turning out an average job and a precision Kwik-Way job.

Perfectly true master plates are covered with Prussian Blue, then placed against the surface to be leveled. The Blue transfers to the high spots. These spots are hand scraped, and this process is repeated until the Blue from the master plate evenly covers the surface to be leveled.

One of the many reasons why Kwik-Way Cylinder Boring Machines are unmatched for precision.

Kwik-Way Cylinder Boring Machines—for easy set-up, fast operation, precision results.

- Overhead chip removal with Vortex exhaustive device.
- Screw feed with automatic retraction.
- Three finger centering for maximum accuracy.
- Rigid construction — no additional supporting devices necessary.
- Quick, easy, accurate tool setting eliminates "sense of feel."

Precision - Speed - Long Life

Kwik-Way

Engine Reconditioning Equipment

Write today for illustrated brochure

CEDAR RAPIDS ENGINEERING CO.

912 17th Street, N.E.
Cedar Rapids, Iowa

MEET *Mr. Cordomatic®*...

HE'LL SHOW YOU HOW TO TAKE THE "TROUBLE" OUT OF TROUBLE LIGHTS!

MR. CORDOMATIC'S the guy who's solving trouble light problems in service stations and garages all over the country! And he'll tell you how to save time and money with the revolutionary new, automatic drop light reel.

Just mount the Cordomatic Drop Light Reel to wall or ceiling . . . and it'll outlast a dozen ordinary dangling, tangling drop cords. It eliminates accidents and loss . . . saves mechanics' valuable time!

And no job's out of reach for this sturdy unit. Just reel it out and put it to work. When you're finished, it automatically reels back with a flick of the wrist!

Put Cordomatic to work in your shop . . . it's the right light . . . where you want it . . . when you want it!

MR. CORDOMATIC THROWS SOME LIGHT ON PUZZLING PROBLEMS!

Watch for "The Case of the Vanishing Cord" in this Magazine.

Cordomatic®

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Please send free catalog and dealer cost sheet.

Name.....
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Your Jobber.....

◀ SEND TODAY

Uses many standard parts for faster service ...new lightweight design gives 7500 extra ton-miles of payload a year*

Longer service, simpler maintenance! Most wearing parts used in this new tandem are identical to parts in widely used Timken-Detroit® standard single axles. This use of standard gears, pinions, differentials, bearings and brakes means more time on the road for operators . . . reduces parts inventories . . . and speeds service.

7500 extra ton-miles of payload a year! This new TDA tandem is over two hundred pounds lighter than any other unit of the same capacity. During an average 75,000 mile year, an operator can save 7500 deadweight ton-miles. This deadweight can be replaced with vital payload that adds up to important extra profit.

Available with a choice of either Timken-Detroit Axle connecting groups, or brackets to accept other approved chassis hook-up parts . . . plus all these additional advantages with the Timken® lightweight tandem:

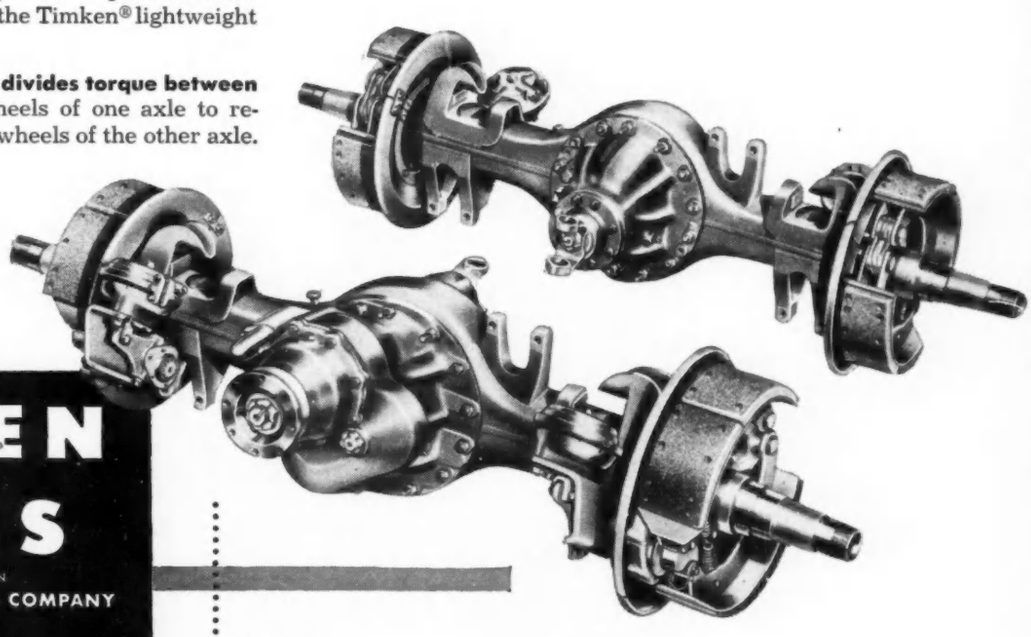
TDA Inter-Axle Differential divides torque between axles—and yet permits wheels of one axle to revolve faster or slower than wheels of the other axle. This means both axles are always doing equal amounts of work—driving parts and tires last longer!

Driver-Controlled Lockout. With TDA inter-axle differential, the driver can obtain the advantage of straight-through drive under slick or icy conditions by locking out the differential at *any* driving speed.

Big, dependable hypoid gears rotate in conventional direction, for maximum gear and bearing life.

This new highway tandem insures new payload profits, faster, easier service and operating economies for truck operators everywhere. For complete information contact your vehicle dealer or branch.

*based on 75,000 highway miles a year.



TIMKEN Detroit AXLES

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ROCKWELL SPRING AND AXLE COMPANY
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The Accepted D A Standard
TRADE MARK REGISTERED

WORLD'S LARGEST MANUFACTURER OF AXLES FOR TRUCKS, BUSES AND TRAILERS

Plants at:
Detroit, Michigan • Oshkosh, Wisconsin
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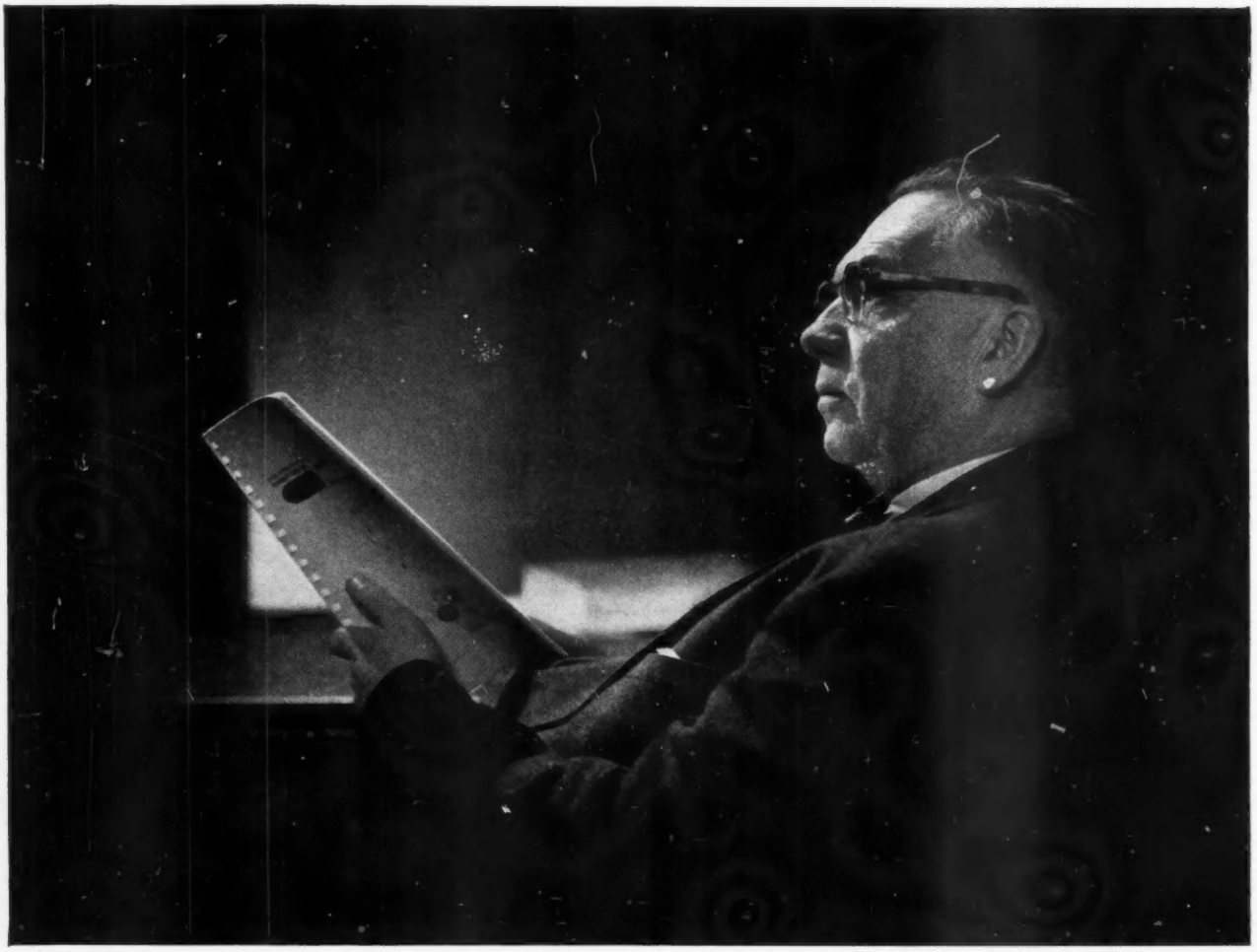

CHARLES R. COX

Portrait by Fabian Bachrach

"I urge every executive..."

"I know of no better method for each citizen to protect the American way of life than by building his own economic security and by helping his Government to keep financially sound. Both these results can be accomplished through the Payroll Savings Plan. I urge every executive in the nation to give this Plan his active and vigorous support."

CHARLES R. COX, ***President, Kennecott Copper Corporation***

With the active cooperation of Mr. Cox, Kennecott conducted a person-to-person canvass which put a Payroll Savings Application in the hands of *every* one of Kennecott's 20,000 employees. The men and women of Kennecott did the rest. Country-wide participation in Kennecott's Payroll Plan rose from 24% to 52%.

Your State Director, U. S. Treasury Department, is ready to help you install a Payroll Savings Plan, or show you how to build participation in an existing Plan through a simple person-to-person canvass. Write today to Savings Bonds Division, U. S. Treasury Department, Washington, D. C.

The United States Government does not pay for this advertising. The Treasury Department thanks, for their patriotic donation, the Advertising Council and

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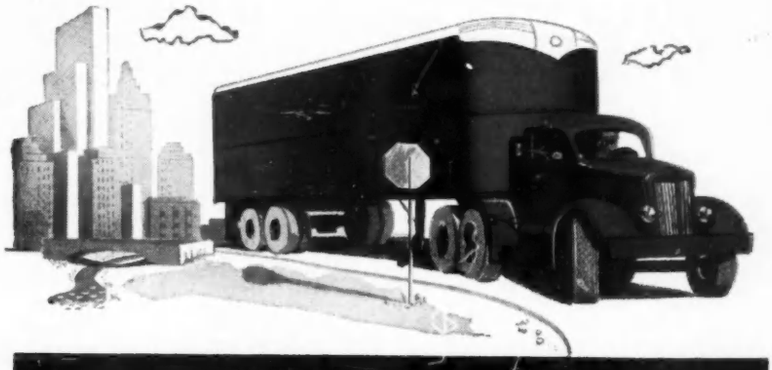
CHROME CONTROL

LEAK-PROOF

REG. U. S. PAT. OFF.

PISTON RINGS

This set will outperform any other piston ring set in the "hard-to-hold" jobs regardless of kind, design or price.



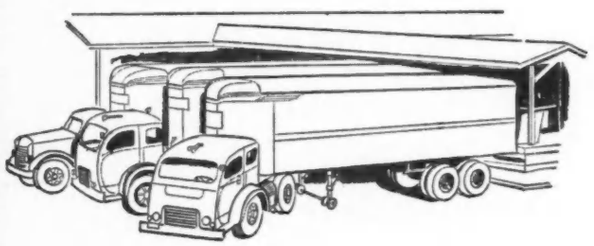
FOR PROFIT

To make a profit you've got to keep your trucks on the road and out of the repair shop. That calls for *dependable* McQuay-Norris parts. They're built to *last!*

TIME TESTED
McQUAY NORRIS
AUTO PARTS
PROVEN IN SERVICE

McQUAY-NORRIS MANUFACTURING COMPANY **ST. LOUIS 10, MO.**

Roy Fruehauf, President, Fruehauf Trailer Company



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says Mr. Fruehauf. "Frequently I find facts and ideas in business publications that help me to make important decisions. We know our customers and prospective customers read *their* business magazines, too. We carry substantial advertising schedules in several different groups of business periodicals."

It is good thinking to judge an advertising medium by the value its editorial pages deliver to regular readers. Business publications provide a direct sales route for any product or service of benefit to business or professional men.

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The national association of publishers of 171 technical, professional, scientific, industrial, merchandising and marketing magazines, having a combined circulation of 4,049,550... audited by either the Audit Bureau of Circulations or Business Publications Audit of Circulation, Inc.... serving and promoting the Business Press of America... bringing thousands of pages of specialized know-how and advertising to the men who make decisions in the businesses, industries, sciences and professions... pin-pointing your audience in the market of your choice. Write for list of NBP publications and the latest "Here's How" booklet, "How Well Will We Have to Sell Tomorrow?" by Ralston B. Reid, Advertising & Sales Promotion Manager, Apparatus Sales Division, General Electric Company, Schenectady, N.Y.

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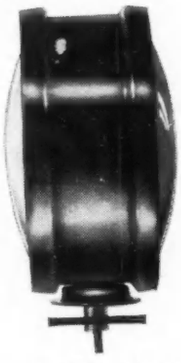
Insist on CLASS A Insist on HEAVY DUTY Insist on ARROW

for 6 and 12-volt systems

ARROW'S CLASS A "MAGNALITE" SIGNALS

Low in cost and designed for heavy duty. Approved for all states exercising control. Lucite lenses guaranteed fadeproof.

"Magnalite" N 127. Single face light for installation on fender, body or frame.



"Magnalite" N 128. Double faced for front and rear visibility.

"Magnalite" N 129. Recessed body for flush mounting.

ARROW DIRECTIONAL SIGNAL SWITCHES

Finest quality, unconditionally guaranteed. Handles move in place with distinctively positive action.

Arrow N 235.
Metallic baked enamel finish. Attractive plastic handle. Self-cancelling.

Arrow N 260.
Baked black enamel. Attractive plastic handle. Manually operated.

Arrow F 280.
Metallic baked enamel. Attractive plated handle, manually operated.

ARROW SEALED BEAM DIRECTIONAL SIGNAL LIGHTS

These businesslike Class A lights mean long troublefree service. Furnished individually.

Arrow N 107. For fender or bracket mounting. Baked black enamel finish.

Arrow N 109. For flush mounting. Baked black enamel finish.

SEE THE COMPLETE LINE OF ARROW "SAFETY AFTER DARK" PRODUCTS

ARROW

SAFETY AFTER DARK

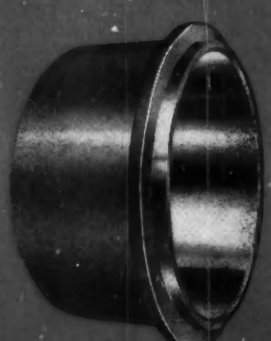
Arrow Safety Device Company, Mount Holly, New Jersey

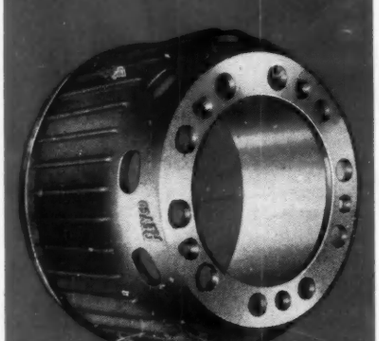
ORDER FROM YOUR JOBBER TODAY

BUS TRANSPORTATION

1955 MAINTENANCE EFFICIENCY

AWARD WINNERS PREFER





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BRAKE DRUMS

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SALES & SERVICE NATIONWIDE!

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SPRINGFIELD, MISSOURI

NEW STUDEBAKER TRANSTARS

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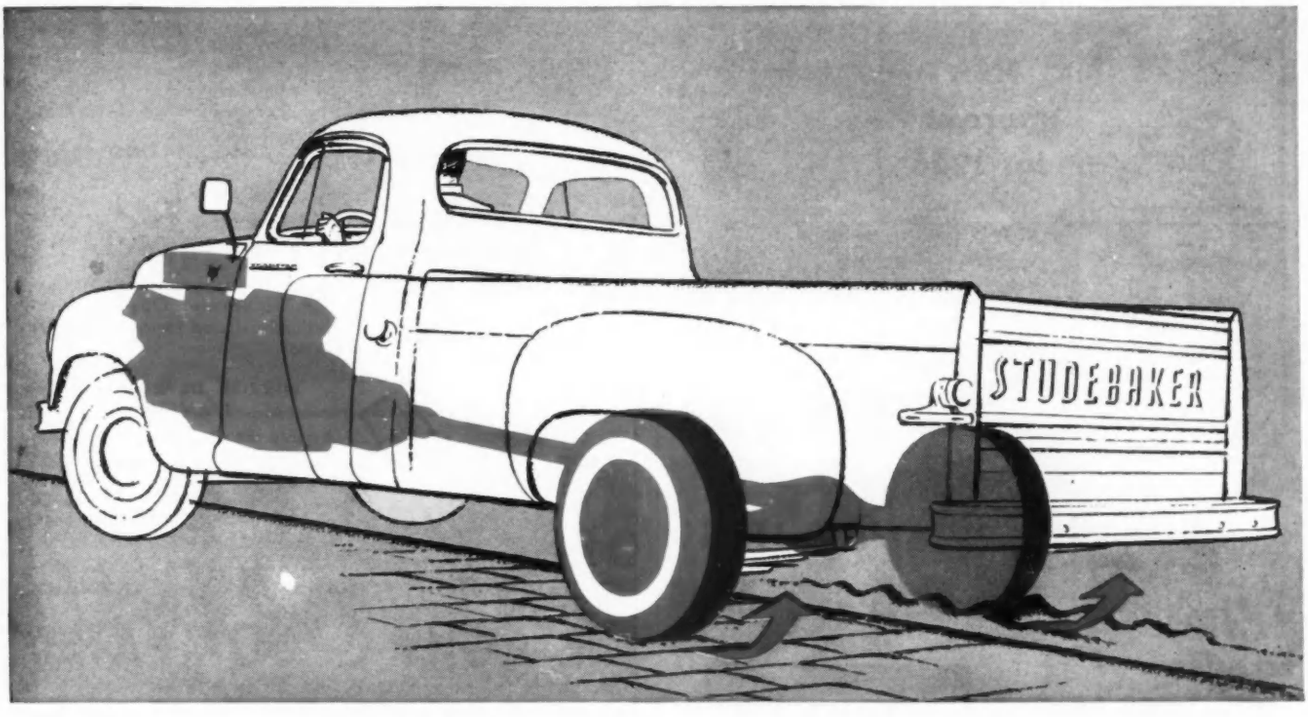

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New truck advancement
delivers power to both rear wheels—
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You get new tractive efficiency with Studebaker's pioneering Twin-Traction differential. In mud, snow, sand, or on ice, it delivers "go" power to each rear wheel. Doesn't let one wheel spin and bog down. With this Studebaker advance, Transtar Trucks are more effective for off-road work. It makes handling, even on rough roads or at highway speeds, easier and safer, too. Drive a new Studebaker Transtar with driving power that always gets you through. Available on half-ton units. Don't spin your wheels. Order your new Studebaker Transtar Truck at your nearest Studebaker dealer's today.

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TUNE IN "TV READER'S DIGEST"

STUDEBAKER TRANSTARS *star performers with saving ways*

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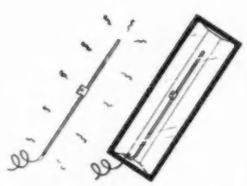

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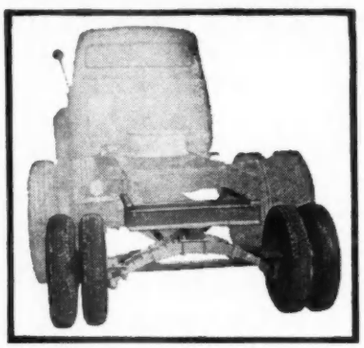
- Sells for about ⅔ *less* than other tandem axles.
- "Follows" around curves . . . eliminates fatigue and tire wear.
- No changes to body or truck frame necessary.
- Axle assembly can be attached or removed in minutes, as needed.



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FOX BODY CO.

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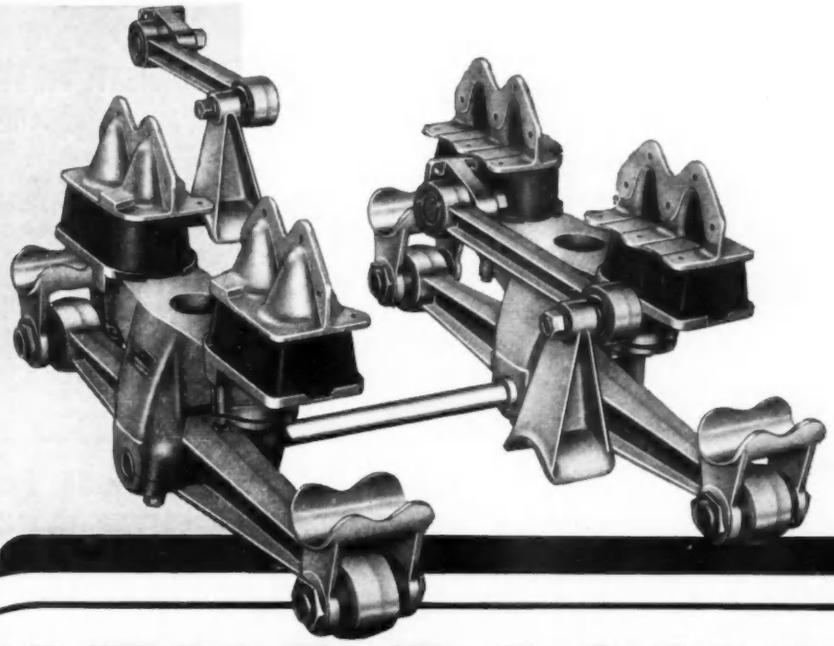

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Tandem Axle Semi-Trailer
Six or Eight Wheel Full Trailer
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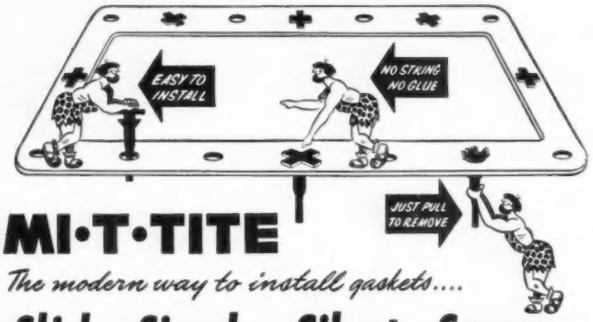

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studs—
bolts—
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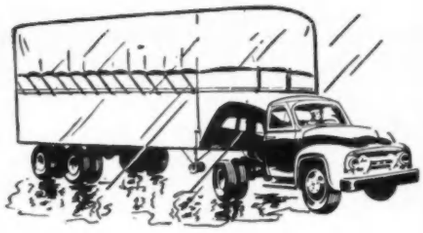

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speed truck maintenance with the TOUGHEST-SAFEST HYDRAULIC AXLE JACK made!

Available in: **Std. Range**—1½, 3, 5, 8, 12 and 20 ton models; **Hi-Range**—3 5, 8 and 12 tons.

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Where mechanical axle jacks are needed, choose the best—Ausco! Thousands are furnished as original truck equipment yearly . . . proof of their quality and dependability!

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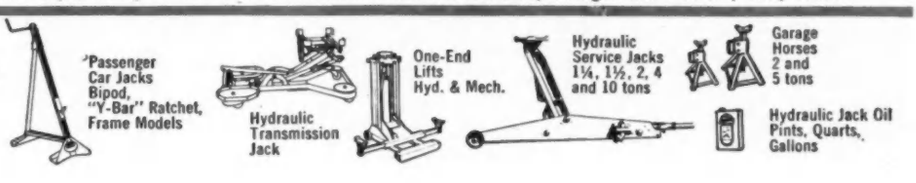
AUSCO manufactures quality jacks for every automotive need . . . service facilities are available in your locality!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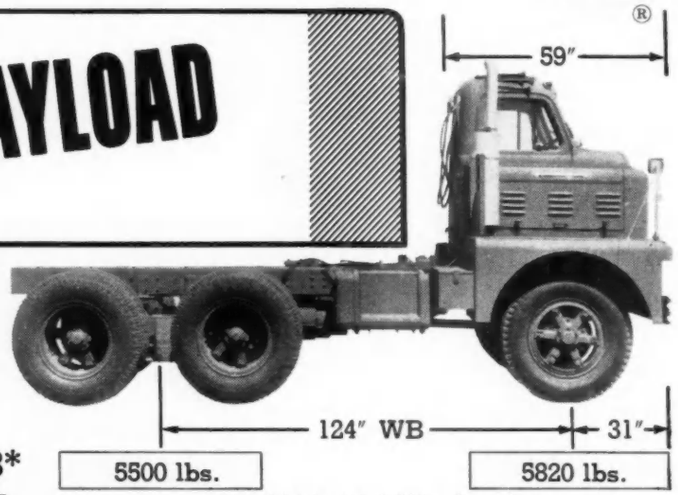

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YOU CAN FIGURE IT OUT FOR YOURSELF. Check these axle weights . . . note FWD's one-man cab length . . . study wheelbase to front-end dimensions. Here's an extra 10% of cube for more payload cargo. *And*, Four Wheel Drive's powered front axle and scientific weight distribution give you greater controllable traction—make steering easier, for the safest, most profitable hauling on the highway.

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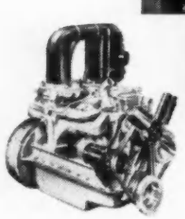

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